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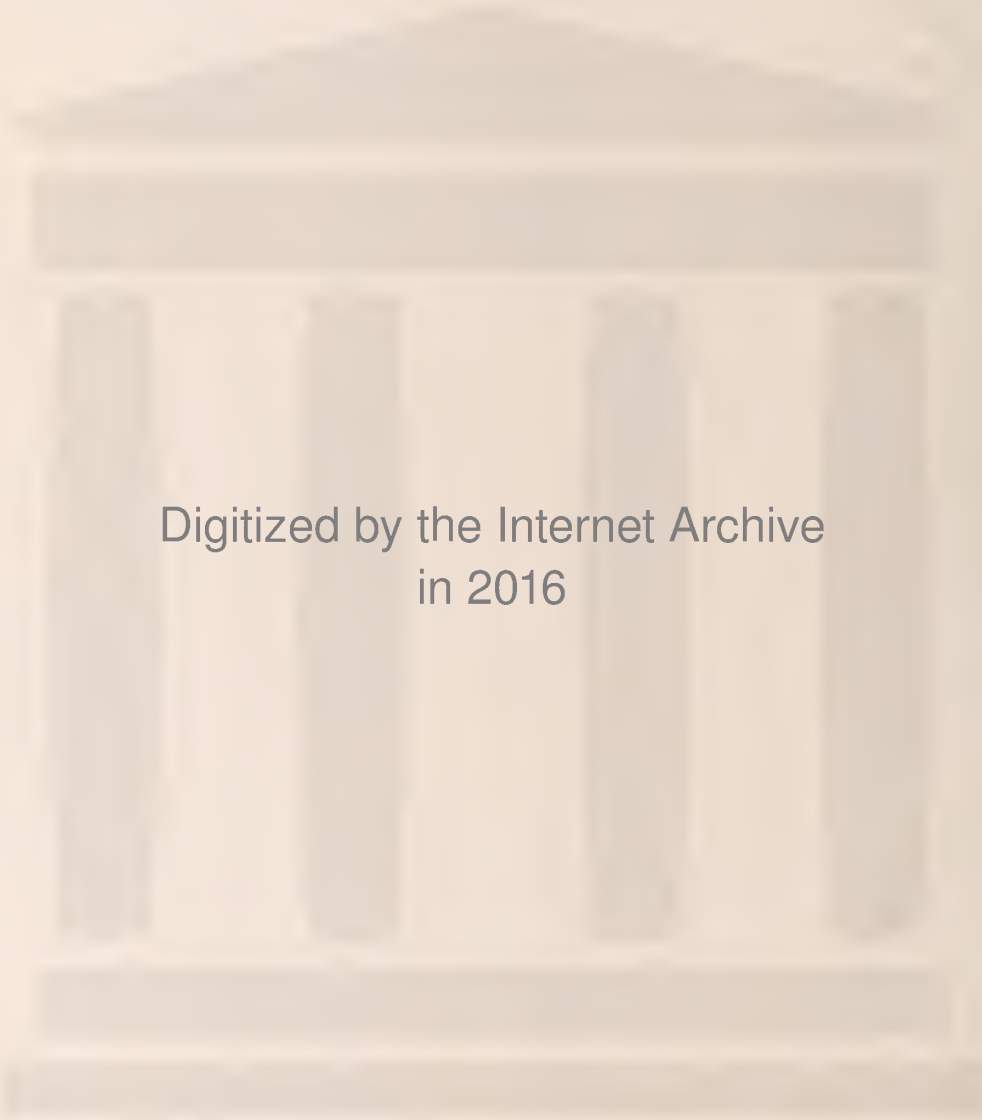


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The
JOURNAL
OF THE OKLAHOMA STATE MEDICAL ASSOCIATION



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May 14-15-16-17

American Medical Association, San Francisco
June 26-27-28-29-30

Oklahoma City Clinical Society, Oklahoma City
Oct. 30-31, Nov. 1-2



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EDITORIALS

A SIGNIFICANT CONFESSION

In the Journal of the Tennessee State Medical Association¹ it is said that the President of the United States confessed "that he just can't find satisfactory definitions of the 'welfare state,' 'collectivism' and 'statism'." "In fact," he said, "they are scare words." These words have been well defined and it may be that the definitions so clearly reveal the President's own political purposes he is afraid to look them in the face. Since the President already is far on the road to Statism and doesn't know how to read the signposts, the people must claim their government and through public sentiment and congressional action they must take a hand in its management.

In the same Tennessee Journal, Senator Dulles is quoted as saying, "Statism represents man's conceit that he can build better than God. God created men and women with great moral possibilities — industry, thrift, creativeness, self-control, compassion, love God and fellow man. These qualities are the foundation of every good society; and government should be a way to give these qualities cooperative expression. But sometimes those in power lose faith in their fellow men. So they take more and more of the fruits of human labor so that they may, as they think, do more and more for human welfare. That process destroys the individual's incentive to produce and destroys his sense of social responsibility. It makes human beings into mere cogs in a man-made machine."

Dulles' definition and his recent defeat may well serve as an ominous warning, an evil omen. Only an intensive educational program wisely and persistently pursued can save us from destruction. Considering the fact that in other countries already crushed by general socialization, medicine has served as the entering wedge and is being so employed here, we must engage all people interested in personal liberty and

free enterprise in a determined fight for freedom. If we lose the fight for medicine, freedom is gone, if we lose freedom, medicine is gone. All good citizens should pool their influence in the protection of their interests.

Only through education and the Grace of God can we hope to preserve the good life vouchsafed by our founding fathers.

THE COST OF MEDICINE NOT SMALL CHANGE

Though millions mean nothing to the government, how can the bureaucrats take on the responsibility for more billions. The Budget Bureau predicts a government deficit of five billions by the end of next June. In fact the figure stands at five billion and 500 millions. We are leaving out the 500 millions as government small change to be ignored.

Significant is the fact that the government will collect three billion less income tax than anticipated and will spend one billion, 600 million more than estimated. It seems a bad time to contemplate the unpredictable cost of nationalized medical care even by obsessive compulsive bureaucrats who have as little respect for the treasury as the proverbial bull for the china closet.

It has been said that "bad money, even in small doses, is a violent poison to the economic system". The high cost of government control over medicine added to the present deficit spending will help make both bad money and bad medicine.

Perhaps the value of a dollar will dawn upon the Fair Dealers when they are forced to go hungry with the taxpayers.

THE CONSTITUTION

It has been said "you cannot eat the constitution". Even so, the present plight of European countries, including Great Britain, indicates that you can't eat without it. The constitution was drawn and adopted in order that we might forever, have turkey for Thanksgiving.

1. "Who's Scared of Words?" The Journal of the Tennessee State Medical Association. 42:10:364, 365 (October) 1949.

RHEUMATOID ARTHRITIS ON THE RUN

An article appearing in the October *Journal of the Oklahoma State Medical Association* on "The Effects of Certain Steroid Compounds on Various Manifestations of Rheumatoid Arthritis — A Preliminary Report" has attracted much attention which it well deserves. The purpose of this editorial comment is to call attention to the fact that this is only "a preliminary report;" that it is carefully worded and that the enthusiasm is cautiously guarded, possible untoward actions noted and timely warnings sounded.

Repeatedly these columns have been employed to hold down unwarranted hope and enthusiasm in connection with unproved and unstabilized therapeutic remedies. Again we call attention to the fact that while the symptoms of rheumatoid arthritis can at least be temporarily turned off, there is no assurance that any of the agents now employed will do more than relieve painful symptoms and induce remissions. No cure is in sight and there is danger of too much excitement on the part of the public and over enthusiasm on the part of the profession as a whole. Even Hench and his co-workers at the Mayo Clinic causing the lame and the halt to take up their beds and walk by the use of E Compound have guarded their publications with the statement "Preliminary Report."

From "Medical Progress"¹ in the *New England Medical Journal* we quote the summary which follows an exhaustive review of the work reported in this interesting field.

"The major metabolic changes induced in man by adrenal cortical steroids are described. The remarkable observations of Hench, Kendall, Slocumb and Polley on the effect of Compound E therapy in patients with rheumatoid arthritis have been extended by the use of pituitary adrenocorticotrophic hormone (ACTH). The status of the adrenal cortical function was ascertained and found to be essentially normal in 16 of 21 patients with rheumatoid arthritis. There appears to be a wide variation in the state of adrenal cortical function from patient to patient, without apparent correlation with the severity or manifestations of the disease. In 9 patients with rheumatoid arthritis in whom pituitary adrenocorticotrophic hormone was

capable of stimulating the adrenal cortex to increased activity, there was striking clinical improvement and a reversal of abnormal laboratory findings. Three patients with rheumatic fever and 3 with disseminated lupus erythematosus were similarly improved by ACTH therapy, as was 1 case of gout.

"With the present inadequate supply of synthetic E acetate and pituitary ACTH, non-specific methods for stimulating an intact pituitary-adrenal system and naturally occurring adrenal cortical extract have been tried with little success in the treatment of rheumatic diseases."

There are many angles to the discussion, one of which is the Oklahoma group's hope that they may be employing steroids relatively as effective as E Compound but much less expensive. None of the angles are so acute that the profession at large cannot await further investigation in this highly specialized field. The physicians' reputation and the patients' welfare should have careful consideration before treatment is initiated.

MEDICINE

*From Iceland to Australia —
from Cuba to Parkistan*

Quite impressive is the British Medical Association Journal's closely printed seven page report of the World Medical Association General Assembly in London¹. The multifaceted problems of the world's heterogeneous medical situation are calmly received, broadly considered, carefully analyzed, freely discussed and tentatively settled or deferred for further consideration. All this with remarkable insight and tolerance leading to a policy of "give and take" characteristic of the medical profession.

While according to the available evidence American medicine is on the giving side both financially and professionally, its influence may exercise a stabilizing and retarding effect upon the present world wide trend toward the destruction of free enterprise and the acceptance of the welfare state.

On the whole the ultimate settlement of controversial problems often represents a seeming compromise considering the relatively high ground we hold, yet the discretionary privileges of participating nations leave us free to pursue our own high purposes.

A consideration of the many complicating conditions, varying professional standards, socio-economic situations and divergent ra-

¹ Medical Progress. Studies on the Relation of Pituitary-Adrenal Function to Rheumatic Disease. George W. Thorn, M.D.; Theodore B. Bayles, M.D.; Benedict F. Massell, M.D.; Peter H. Forsham, M.D.; Richardson Hill, Jr., M.D.; Stephen Smith, III, M.D.; and Joseph E. Warren, M.D. *New England Journal of Medicine* 241:14:529-536 (October 6) 1949.

cial and political attitudes so well understood by the medical profession, trained to erase international boundaries, leaves us wondering whether less tolerant politicians, diplomats and statesmen, may get along with a world government in case the 1951 vote places us in line for such a proposal. Can we hope to avoid war and exercise influence for world peace and socio-economic improvement in keeping with the World Medical Association's accomplishments in the field of medicine. In spite of political ambitions and controls so inimical to the progress of medical science, the profession's untiring efforts in behalf of universal health, peace and happiness afford the most eloquent testimony of civilization's ascendancy.

Yet the pros and cons ever remind us that eternal vigilance is the price of freedom. Even while dreaming of things noble, grand and good human depravity may touch wood and with Kipling we may be forced to say, "Brother, thy tail hangs down behind! This is the way of the monkey-kind."

Wise in the ways of evolution, physicians should never be caught swinging from tree to tree.

BRITAIN'S NATIVE-BORN

Writing about the native-born on far flung seas, Kipling said, "We learned from wistful mothers to call old England home." Today Britons who have never left the island dream of "old England" and would like to call her home. They hear the English skylark and see the lovely countryside and long for the one time peace, comfort, freedom and food.

In three and a half weeks with the fine brave people of England and Scotland during the past summer we had fresh eggs for breakfast twice and a thin slice of bacon once. The sausage was only a false hope. The well stuffed links were intriguing but what little nondescript meat they contained was lost in the bread crumbs and oatmeal which made them plump and gave them the soft, slitherly taste of an over-ripe avocado. The better people grow fat on carbohydrates while pining for proteins. They have become weary of regimentation while longing for oldtime freedom. They despair of the future because of the futility of effort under the socialist government. With only 50 million population, Britain now has 5,700,000 government employes but they need more

inspectors to make sure the farmers eat only one egg a week. It takes a lot of people out of production to see that the rest of the people do not eat what is being produced. This may truly prove to be the vicious circle.

The citizens of the United States should read Gibbons Roman Empire before it is too late. Already we are on the road and these days it seems that all roads are leading down the lane that channeled Rome to ruin.

Socialized medicine accelerates the speed and hastens the end. It's a choice morsel for the do-gooders, and the wild nightriders who, with flaming torches, burn their way to the Welfare State.

SCHOOL FOR TERMITES

It is estimated that there are over 1300 foreign born Communists from behind the Iron Curtain in the United States working with approximately 80,000 native born so-called Americans, all striving to undermine our way of life. According to Dr. George S. Benson¹, 800 of our native born have been trained in a Kremlin school of indoctrination with the hope that their nefarious underhanded attacks upon the principles of freedom may be ruthlessly effective.

It is difficult to believe that of our own American flesh and blood, hundreds have been behind the Iron Curtain for tactical training in the dark, destructive ways of adroit termites.

Before our foundations crumble we should give them the creosote with a deadening dash of crude carbolic and bit of brimstone. No doubt the American graduates of the Kremlin school have been well indoctrinated with the policies of the Marxist, Bolshevik Lenin whose illegal revolutionary career completed the serfdom of the Russian people and the medical profession.

Being the arch enemies of our government, these traitorous pale ants of the order Isoptera, "social termites", are advocating socialized medicine in this country as their chief objective because it serves as the most effective medium for the infiltration of our government.

To all such pusillanimous insects physicians should rank political poison.

1. The Secret of American Prosperity. Dr. George S. Benson, President of Harding College, Searcy, Arkansas.

SCIENTIFIC ARTICLES

TASK OF THE PRACTITIONER IN CHILD HEALTH PROTECTION*

MYRON E. WEGMAN, M.D.

NEW ORLEANS, LOUISIANA

The recent nation-wide survey of the American Academy of Pediatrics¹ has emphasized the fact that most of the care of children in this country is given by general practitioners and that, furthermore, a large proportion, 30 percent on the average, of the practitioner's time is spent in the care of children. Of even more direct interest is the proportion of time given to the care of well children. Over the country as a whole this constitutes almost one-third of the total care given to children by general practitioners. Thus, almost a tenth of the time of the general practitioner is spent in what is properly called child health protection. Although there is considerable variation from one part of the country to another, there is no doubt that this figure represents a sharp change from the situation 25 years ago when much less time was spent on the well and proportionately more on the sick.

PREVENTION OF INFANT MORTALITY

Historically, the stimulus to organized and planned preventive medicine for children came from horror at the extraordinary death rate during early life. As recently as 35 years ago more than 10 percent of all infants born alive in the United States were dead before the end of their first year of life. Even at that this rate was probably low compared to many countries. In Oklahoma the rate at the time the state was admitted to the registration area, in 1928, was 69 deaths per 1000 live births. Since then and more particularly in the last 10 or 15 years the decline has been steady. In 1946 the state figure was 32.5, 52 percent lower than two decades previously.² While the state can be congratulated on striking progress, there is no room for complacency when one realizes that in Oklahoma in 1946 there were more than 1600 babies who were born

alive but who died before their first birthdays.

So many factors have entered into the decline in infant mortality that it is almost impossible to analyze the influence of any one. It is possible, however, to establish the characteristics of the decline and what fields remain to be attacked.³ One striking change has been reduction in deaths from diarrhea and enteritis. This certainly reflects the better instruction in feeding and greater parental interest in preparation of feedings which have been stressed as part of expanded well baby care. Striking decline has also been observed in relation to respiratory disease — probably in large part because of better handling of respiratory disease in the general population. There is little doubt, however, that instruction to parents in avoiding exposure of small infants has been a contributing factor.

While there has been some decline in deaths due to the so-called "diseases of early infancy" the decrease has been much less striking. This has resulted in a change in the age distribution of deaths during the first year. Thirty years ago only one-third of deaths in the first year of life took place in the first month. Now this figure is more than two-thirds. The major causes of deaths in the first months are listed as prematurity, asphyxia neonatorum and birth injury. In attacking these causes the general practitioner who gives the mother prenatal care, delivers the baby and then continues to care for him through childhood is in a more strategic position than the pediatrician since he is able to bring his best efforts to bear on obstetrical as well as newborn and childhood complications.

In recent years the problem of prematurity, with its extraordinarily high mortality rate and prominent position among the leading causes of death at all ages has attracted increasing attention. It has been

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association May 18, 1949.

demonstrated conclusively that good care and good equipment can produce a marked lowering in mortality in premature infants, particularly those weighing over two and one-half or three pounds. Promptness in early care and immediate placement in a proper environment are of paramount importance for the baby's outlook.⁴

Much more might be said about the subject of infant mortality; its fundamental importance in planning any program of preventive care for children must never be forgotten. Child health protection, however, signifies much more than prevention of deaths. Prevention of disease and guidance to a healthier life demand our interest.

IMMUNIZATION AGAINST COMMUNICABLE DISEASE

This fundamental part of child care has probably been carried out with more consistency and efficiency than any other child health measure probably because of the specificity of the procedure and the fact that definite rules of procedure can be laid down and followed without difficulty. While immunization, properly carried out, is a cornerstone of child health protection and must not be omitted, a word of warning is in order against the temptation to consider it the entire program. At the same time the practitioner must remember that really adequate protection of his own patients demands that there be an extensive community-wide program of active immunization to diminish chances of the infection ever getting a foothold in the community.

The procedures to be carried out will vary to some extent but there is general agreement that every child should be immunized within the first year of life against smallpox, diphtheria, tetanus and whooping cough and that appropriate stimulating or booster doses should be given later in infancy and at the time of school entrance. The problem of immunization has been much simplified in recent years by the development of effective combined antigens. A rational program should be carefully integrated with the basic program for supervising growth and development. On the basis of present evidence, injections of combined, alum precipitated, diphtheria and tetanus toxoids with pertussis vaccine may be given at the ages of two, three and four months.⁵ These are usually followed in the fifth month by vaccination against smallpox. A booster dose of the triple material is given at the age of one year and again

at the time of school entrance. Some may wish to give additional booster doses, to which there is no objection but it is likely that major benefit will be accomplished by seeing to it that all children have this minimum program.

The use of gamma globulin in prophylaxis for measles is of unquestioned value but since its effectiveness is of limited duration, not over two to three weeks, such prophylaxis should be limited to babies under three years who have had intimate family exposure and to children ill with some other disease.⁶ In some areas of the country, depending upon local conditions, typhoid immunization is practiced routinely.

PROMOTION OF PHYSICAL AND EMOTIONAL HEALTH

With the decline in infant mortality and in preventable diseases there has been added to the interest in maintaining and extending advances in these two fields, that of guiding growth and development to higher levels of physical and mental achievement and emotional adjustment. There has been greater and greater realization that the responsibility of the physician goes deeply into the field of guidance in everyday problems as they arise during growth.

The physician gives consideration to many facets as he undertakes supervision of growth and development with their remarkably constant general pattern yet great individual variation.⁷ Periodic examinations and regular measurements help him appraise physical growth and give him the opportunity to detect promptly any defects or deviations from normal. Conferences with the mother are the avenue for specific feeding and nutritional advice as well as for mutual discussion of problems of guidance, emotional relations and habit development.

INFANT FEEDING

The traditional field of well-baby care is feeding advice. When milk mixtures were calculated on an elaborate percentage system and when attempts were made to figure precisely how many calories the baby needed there was plenty for the doctor to do in just plain arithmetic. Fortunately, this problem has been much simplified with more rational approaches to infant feeding.⁸

When supplementary vitamins first became routine every mother needed an explanation of the importance of cod liver oil and orange juice. Parental knowledge in the present generation of mothers has broadened considerably but detailed instructions

on milk mixtures, solid foods, methods of preparation, vitamin supplements all continue to be basic. Knowledge of the essentials of infant feeding is therefore a fundamental tool of the practitioner.

Encouragement of breast feeding has achieved renewed interest as appreciation of psychological factors has been added to the always present advantages of simplicity and safety. Many mothers who wish to nurse their infants can be helped to do so by the physician if he knows how to advise her on diet, regimen and the need for complete emptying of the breasts. The mother who cannot nurse her baby successfully needs to be reassured that most of the advantages of nursing can be achieved by careful attention to details of food preparation and method of feeding. Warmth and affection can be readily provided to the bottle fed baby if the mother understands the need. Fortunately, formula preparation has been much simplified and easily prepared mixtures of evaporated milk, water and sugar are quite satisfactory. Less concern over exact amounts and more recognition of the value of the baby's appetite as an indicator of need have helped make things easier for both mother and physician.

PSYCHOLOGIC ASPECTS

In recent years interest has developed in a different phase of the subject of infant feeding and indeed of the whole field of child health protection. Powers characterized this as the "psychologic era" in his classical paper in 1935.¹ Pediatricians and psychologists have realized that the feeding situation was so important in shaping habits that many of the standard concepts of schedule and training needed careful review and analysis. Partly on the basis of physiological research on average emptying time of the stomach and partly under the influence of the rigid behaviorist school of psychology, great emphasis had been laid on the development of regularity. Schedules were fixed; mothers were told precisely what to do for the baby at specified hours and any deviation from the routine was interdicted. Woe betide the mother who confessed to her physician that she fed the baby before his proper time, just because he was crying. "Feed the baby by the clock," was the watchword taught to many generations of medical students and internes. Reaction to such routine was inevitable and probably started with determined grandmothers who had fed their babies every time they cried and had seen no ill-effects. A new term,

"Self-demand feeding", was coined for the old-fashioned routine, but the older physicians heaved a sigh of relief as they saw the pendulum swing back.

There is little question that the method by which the early food situation is handled is important to the child's adjustment and composure. The physician must make clear to the mother at the first interview about the baby that babies will vary, like all other human beings, and each one must be handled individually. Most mothers, particularly young ones, who are overwhelmed with the responsibility of the first baby, want some sort of schedule to plan their housework. In giving such a schedule the physician needs to get across the idea of elasticity, of letting the baby help determine his own routine. The baby will do so with surprising consistency if given a chance.

It has been mentioned that mothers of first children have more difficulty in this regard. A practitioner doing well baby care needs to anticipate this difficulty before the mother has to face it by discussing the problem with her, prenatally, if possible, but certainly before she leaves the hospital with the baby. It is not often realized how much most mothers learn to depend on hospital routine and how much assistance they need during the first few days when they are out on their own. This, incidentally, is a period when the trained public health nurse can be of inestimable value to the practitioner in helping achieve better results from his teaching and in saving him time by advising the mother on minor problems. In many communities it has been possible to arrange for the nurse to visit the home within the first day or two after the mother has come home from the hospital. The mother can then be counselled on how she can best carry out the doctor's orders in her own environment. If there is any evidence of difficulty the nurse will notify the physician at once, thus avoiding more serious trouble later on. For such nursing assistance to be truly effective it must be cooperative; that is, the nurse must understand the physician's views and he must be familiar with the kind of instruction she is used to giving on the minor details of household care of the baby.

Before discussing further the significance of the change in attitude about schedules and feeding regulations, it would be wise to turn to another even more recent development. This is the idea of "rooming-in" — again— a new-fangled term to describe an

old idea and another instance of the pendulum swinging back in revolt, this time against the strict nursery isolation practice in most maternity hospitals. The advent of this new idea has unquestionably been hastened by the enormous increase in recent years in the proportion of deliveries taking place in hospitals.

The term "rooming-in" refers to the practice of keeping the newborn baby next to his mother in the maternity hospital and giving her responsibility for a large part of his daily care. She thus can become used to him and be accustomed to his care instead of being in the position of taking home a virtual stranger. Several interesting experiments are now in progress in regard to methods of applying this principle to general wards as well as private rooms. Dr. Edith Jackson, in reporting the results of one such experiment⁹ noted that the majority of mothers were enthusiastic about the idea and that most of the hospital nurses thought it quite practical. It is hardly necessary to mention the fact that this way of caring for babies was the only way until relatively recent years. As a matter of fact, the chairman of the Committee on the Fetus and Newborn of the American Academy of Pediatrics reported recently that he was having considerable difficulty in finding just when the idea of a separate hospital nursery was introduced.

ANTICIPATORY GUIDANCE

The newer, old-fashioned ideas on schedules and on rooming-in are cited as examples of a whole new era in doctor-patient relationships. They typify the need for understanding the sources of emotional tensions and what is known of how they may be avoided. The easy task for the physician is giving "shots" or writing prescriptions. The difficult task is the willingness to lend a sympathetic ear, to welcome discussion with the parent and to give the kind of balanced advice which she will accept. Pediatricians have begun to call this medical service "anticipatory guidance." When the physician understands the normal patterns of social and emotional growth he can foresee the problems which will arise before they have actually appeared. Obviously all of this takes time and it must be emphasized that there is no substitute for time in the parent-physician relationship for child health supervision. A clinic, or for that matter, an office, in which the physician must see 18 or 20 patients in 2 hours hardly provides

a favorable environment for the kind of conference and discussion which are likely to be valuable and productive.

Among other possible danger points in development is the introduction of solid foods. This is usually easy but it is not uncommon to see a child refuse what is offered the first time. The mother who begins to force with the first refusal is making trouble for herself and her doctor. If the mother has been warned of what impends she may be able to control her desire to have the child "eat everything." The word "may" is used advisedly. Knowledge of good practice does not always mean ability to carry it out. The old adage about leading a horse to water is entirely applicable to the development of eating habits in children.

The time of weaning is another point of difficulty. Spock¹⁰ has discussed this and the preceding point in his excellent paper on "Avoiding Behavior Problems." Again individual variation is paramount. With some children the change from breast to bottle or cup may be simple and smooth. With others there may be the most passionate resistance. Patience and tolerance will go a long way. Powers⁸ pointed out as a basic principle that: "If a battle impends in the handling of the child, the conflict must be won by strategy and not by force — a weapon that has so small a place in the armamentarium of the pediatrician as to be always invisible and rarely used."

Toilet training presents many potentialities for conflict. Desire to compete with the neighbors' children and resentment over dirty diapers cause many mothers to attempt to train children before they are ready. Sometimes such training is accepted placidly, although it is usually the mother who is trained rather than the child, but too often the child rebels from the outset. Many abnormalities in toilet habits later in life are associated with improper handling of early training. When the physician has a chance to discuss these facts with the mother early enough there is much more likelihood that she will take a sensible and relaxed attitude.

One might continue to outline many more common situations which are potential problems but these have been extensively and ably discussed elsewhere.¹¹ It will be evident that sensible handling and advice are based on a fundamental way of thinking and approach to childhood.

It is necessary to have clearly in mind the basic concept of readiness. A schedule

or a specific act or accomplishment will be achieved most effectively by a child when his own growth has brought him to the stage of readiness for the specific step. Achievement can be aided and success hastened by adjusting the environment to make the establishment of the pattern easy. This may be called training if one so desires but it is a training of accomplishment and balance rather than force and pure drill.

ATTITUDES AND PERSONALITIES

So much emphasis has been placed on understanding and tolerance that it is not amiss to consider the physician's own background in relation to his ability to take such an attitude. The physician's task is far from easy. He is himself a human being, subject to all the emotional stresses of his own growth and his own life situation. Insight into the influence that personal factors may have on his dealings with parents is vital and good results frequently depend on the depth of that insight.

If the physician's own personality is important in his relationships to mothers what of the mothers themselves? All that has been said of the influence of the physician's background is obviously even more significant in regard to the mother. Her own childhood experiences may greatly aid or seriously hinder the physician's efforts to give her an understanding of growth. Not every mother can be reached successfully but more good will be accomplished when all these factors are considered.

A pertinent point in this regard is how much can be done at the first visit or at any one visit. There is always the temptation to give the mother a great deal of advice, more than she can digest. Moderation and emphasis on an understanding attitude are most important. Frequent visits are desirable in the early months to give the mother a chance to talk things over fully. Pediatricians have found that apparently excessive time spent at first in answering the many seemingly trivial questions and relating them to the process of growth is frequently repaid later by fewer demands for help and more intelligent management of later problems by the mother.

I can best summarize the attitude toward children which is to be desired of physicians and parents by taking a leaf from the previously cited paper of Powers⁶ and quoting Ralph Waldo Emerson in his *Essay on Education* (1833).

"I believe that our own experience instructs us that the secret of education lies

in respecting the pupil. It is not for you to choose what he shall know, what he shall do. It is chosen and foreordained, and he only holds the key to his own secret. By our tampering and thwarting and too much governing he may be hindered from his end and kept out of his own — Respect the child. Be not too much his parent. Trespass not on his solitude.

"But I hear the outcry which replies to this suggestion: Would you verily throw up the reins of public and private discipline; would you leave the young child to the mad career of his own passions and whimsies, and call this anarchy a respect for the child's nature? I answer, Respect the child, respect him to the end, but also respect yourself. Be the companion of his thought, the friend of his friendship, the lover of his virtue and the imperturbable slighter of his trifling."

SUMMARY

1. Recent studies emphasize the fact that a large proportion of the time of general practitioners is given to the care of well children. Child health protection involves prolongation of life, prevention of disease and health supervision by means of examination and conference.

2. Infant mortality, the original stimulus to organized child health protection, has shown a gratifying decline in recent years but is still needlessly high. More work needs to be done in prevention of deaths in the neonatal period, particularly among premature infants.

3. A planned community-wide immunization program should aim at protecting all children, in the first year of life, against diphtheria, pertussis and smallpox. Booster doses are an essential part of the program.

4. Promotion of physical health requires regular supervision with adequate time for conference between physician and nurse. Understanding of normal growth and development is essential.

5. The traditional field of infant feeding has been simplified in mechanics but there is increased recognition of the emotional content of the feeding situation. Breast feeding is simplest and most desirable but most of its advantages can be obtained through attention to essential details of bottle feeding.

6. Elastic daily schedules and adjustment to the child's readiness for progress are desirable guides in supervisory advice.

7. Earlier contact between mother and newborn child, and prompt public health nursing visits to homes with a newborn infant have been effective means of aiding better maternal adjustment.

8. Physician-parent relations will be happiest and most helpful when based on understanding attitudes and appreciation of one's own emotional background.

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HAY FEVER IN INFANTS*

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Much space has been devoted in the literature to discussion of allergy in children, but most is primarily concerned with asthma and eczema. Hay fever, croup, urticaria and gastrointestinal allergy are given much less space. When hay fever is discussed, it is most often in terms of seasonal rhinitis in older children. Most of the writing on the subject of allergy has been by allergists, who naturally see few small infants in their practice. Only in recent years, since pediatricians have become interested in allergy as a sub specialty, has it been pointed out that hay fever may occur at any age, even in early infancy. The fact has not yet gotten across to most medical practitioners that hay fever is a common condition in children under the age of two years; in fact, it may have its beginning at the age of only a few days or weeks. The following case histories illustrate this point.

Case 1. A 19-month old boy was seen at my office with a history of "colds" all his life. This was first noted the day after he came home from the hospital at the age of five days. At three weeks his doctor had prescribed nose drops which gave little relief, and nasal discharge and obstruction continued. At the age of eight months he was hospitalized and received penicillin for bronchitis and otitis media. For the next nine

months he had received one or two penicillin injections per week for his constant "colds" together with one blood transfusion and semiweekly intramuscular liver and intravenous iron injections for persistent anemia. Still the hemoglobin was not elevated and he continued to have constant profuse, thick, mucoid nasal discharge. There was a strong family history of allergy.

Physical examination in my office revealed no abnormalities other than nasal discharge and obstruction, and obvious anemia. His hemoglobin was only 9 gms. A nasal smear revealed almost 100 percent eosinophiles.

The parents were instructed to eliminate wool blankets, cover mattress and pillows, and procure a good vacuum sweeper. Drug therapy included only pyribenzamine, vitamin supplements and iron. At the end of two weeks the child's nose was clear for the first time in his life and the hemoglobin had increased markedly. In the five months since his initial visit he has had only two mild attacks of hay fever, the first during a visit to his grandmother's home, and the second during the cleaning and painting of the plaster ceiling and walls of his home. A younger brother, now aged five months, also began having nasal discharge upon going home from the hospital on the fifth day. His nose cleared incidental to his brother's hay fever regime. He likewise had symptoms during the house painting and was relieved with pyribenzamine.

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Case 2. A six-weeks old premature female infant was first seen at the hospital after her twin sister, who had persistent nasal discharge from birth, had aspirated her formula and died of asphyxia. This patient also had thick, mucoid nasal discharge. At the age of eight weeks a diagnosis of hay fever was made on basis of 90 percent eosinophiles on nasal smear. Hemoglobin was 55 percent.

The parents were instructed in removal of common household allergins and pyribenzamine, vitamin supplements, and ferrous sulfate were prescribed. Instructions were not followed and she developed two severe attacks of tracheobronchitis. After this she was taken out of her parents' bed and placed in a bassinet of her own, allergins were eliminated and medications given as prescribed. Only then did the nose become clear for the first time. Skin tests revealed marked reaction to dust and wool with slight reaction to rayon and feathers. It is interesting to speculate that this baby's twin aspirated her formula because of nasal obstruction due to allergic rhinitis. That death at six weeks might then be indirectly attributable to hay fever.

In the four-month period between December 1, 1948, and April 1, 1949, 24 additional cases were seen at the office on whom the diagnosis of hay fever has been made. The youngest at time of diagnosis was two months. More than half gave history of onset of symptoms prior to the age of six months.

DISCUSSION

When suspecting allergy, a detailed history by the mother is by far the most important part of the examination. In many cases where all laboratory tests are completely negative, accurate diagnosis is made on history alone. The mother's first statement is almost invariably, "He has had a cold all his life and nothing ever seems to do it any good." In the majority the "cold" is much worse during the winter, and onset of severe symptoms occurs about November 15 to December 1, possibly due to closing the doors and turning on the heat, making household allergins more concentrated. Sneezing, itching of the nose, lacrimation, cough and wheezing may be present in addition to the characteristic profuse nasal discharge which may be either thin, watery or thick, mucoid in type. Frequently there is history of other allergic manifestations such as asthma, sensitivity to baby oil,

or colic, vomiting, diarrhea, and urticaria due to certain foods. Otitis media is a frequent complication. Almost invariably there is a strong family history of allergy. Inspection of the nose reveals characteristic pale, glistening, edematous mucous membrane in contrast to the redness of hyperemia present in acute coryza. There is nasal obstruction, mouth breathing and often post nasal drip. These babies are usually underweight and anemic, particularly if there is associated gastrointestinal allergy.

Demonstration of eosinophiles in nasal secretions is the one most valuable laboratory test in confirming the diagnosis of hay fever. Their presence is almost pathognomonic, but failure to find them by no means disproves the diagnosis. Blood eosinophilia is not characteristic as in asthma. Several examinations of nasal secretions may be necessary since eosinophiles may be absent one day and present the next, or they may be found in abundance on one slide and not on another taken the same day. They may even be abundant in certain fields and not in others on the same slide. Considerable care is necessary in making the smears. Occasionally good smears may be made by simply placing nasal drippings on a slide, but these are more often negative. Continuous direct contact of a swab with the mucous membrane for at least one minute will usually result in positive smears in allergic rhinitis. Glaser¹ has described a technique of putting a small tight swab on strands of flexible copper wire and inserting it to the posterior nasopharynx for one minute. Tears dilute the mucus and make it undesirable for examination, and since an infant cries with this procedure, he should be placed on his abdomen while the swab is in place. The smears are best stained by the Giemsa technique, but Wright's stain may be used.

Practically all infants suffering from true hay fever are sensitive to inhalents. Food, drugs, physical agents and bacteria are less common offenders, being more often associated with asthmatic symptoms. Many infants have true nasal allergy only, and are not always associated with asthmatic bronchitis as some writers have stated. A larger proportion of older children have a seasonal type of hay fever due to pollens and molds, while small infants are more likely to have perennial type, possibly because of less exposure to the seasonal type of allergins. In my experience the most frequent single causative factor in infants is house dust.

The other common ones in their approximate order are, wool, feathers, pets, and sometimes tobacco, gas fumes and paint. Cold air itself aggravates many patients, but most infants sensitive to house dust are relieved when taken outside the house.

The diagnosis of hay fever is made upon the basis of personal history of allergic manifestations, appearance of nose and secretions, nasal eosinophilia, family history of allergy and response to treatment. It should be emphasized that skin tests do not make the diagnosis of either hay fever or asthma, but rather are just additional laboratory tests to support the diagnosis and aid in isolating allergins, once the diagnosis is made. Skin tests may be made at any age, even in early infancy. However, hay fever in young infants most often can be relieved without resorting to these specific tests in contrast to asthma, which is more often etiologically obscure. When cutaneous testing is necessary, the scratch method is preferable because it is safer, it eliminates the necessity of doing multiple needle punctures, and there are fewer false positives due to greater irritability of infant skin. Glaser¹ has described how these tests are most easily done.

In infants the treatment of hay fever unaccompanied by asthma is usually not difficult and should not require the assistance of an allergist. The first principle in the treatment of hay fever or any other allergic manifestation is removal of the specific allergin, if determined. In infants, one is justified in starting an elimination program on basis of probability. Detailed instructions for elimination of house dust must be given including recommendations for a vacuum sweeper of adequate suction, wherever possible. If this cannot be provided, a wet mop and damp dust cloth are to be used daily. Only washable rugs and curtains should be used. The mattress must be dust proofed, wool blankets replaced by cotton quilts or blankets, and feather pillows discarded. The baby should not be placed on an adult bed for diapering or for play. Caution is given about pets, gas fumes, tobacco smoke, paint, and volatile oils as possible sources. Any food which seems not to be well tolerated is eliminated. The bedroom should be kept fairly warm in winter and cold air never allowed to strike the child while sleeping. If these measures do not afford relief, then certainly skin testing should be done.

Antihistamine drugs such as benadryl, pyribenzamine and others will give slight to complete temporary relief providing attention is also given to the above elimination procedures. These drugs are tolerated by infants in relatively large doses. Occasionally, vomiting may be severe enough to prevent their use, but drowsiness, so objectionable in adults, may actually be desirable in irritable infants. Nose drops containing sulfonamides, penicillin, argyrol, ephedrine or epinephrine derivatives may actually be harmful due to secondary congestion and intensification of symptoms with continued use.

Since many of these patients have either food sensitivities or temperamental eating habits, particular attention should be given to adequate vitamin intake. One of the water soluble multiple vitamin preparations is usually most satisfactory for allergic children. Supplementary iron is also frequently required, though it should be emphasized that there is little response until the allergic symptoms and secondary infection are fairly well under control.

Inoculations against infectious and contagious diseases are most important in this type of infant. If there is any associated asthmatic tendency, pertussis may set up a train of respiratory symptoms which persists indefinitely. Immune globulin should also be given upon exposure to measles.

Unlike in asthma, desensitization in the infant age group is seldom necessary to control symptoms of hay fever.

SUMMARY

1. Hay fever in young infants is much more common than generally recognized.
2. Eosinophilia in nasal secretions is confirmatory, but diagnosis may depend upon history, physical findings and clinical response to treatment.
3. House dust is the most frequent single allergin in this series.
4. Relief is usually obtained by removal of common household allergins and use of antihistamines, vitamins and iron supplements.

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THE EARLY DIAGNOSIS AND TREATMENT OF MENINGITIS IN INFANTS*

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The poor immunological response of the infant to infections of the central nervous system increases the importance of early diagnosis and adequate therapy in this age group.

The well known classical signs of meningeal involvement,—Brudzinski, Kernig, Babinski, deep reflex changes, etc.,—are not helpful in the early diagnosis. Their absence, early in the course of the infection, is actually misleading. Perceptible bulging of the anterior fontanelle may be helpful, but its absence early in the course of the disease does not rule out meningitic involvement. Changes in the sensorium, like irritability, restlessness, drowsiness, or convulsions are suspicious findings frequently seen early. Tache cerebrale, muscle and skin sensitivity to touch or pressure, slight changes in the deep reflexes, (particularly when asymmetrical), and in the infant over six months of age, the positive Babinski sign, are suspicious of early meningitic involvement.

Any infant who appears to be acutely ill and markedly irritable, restless, or drowsy, without physical findings adequate to explain these changes, should be considered as a possible early meningitis. When there is reasonable doubt about the presence of meningitic involvement, a spinal puncture should be done. There is no good reason to delay this procedure since it can be done safely with reasonable precautions. If the infant is extremely restless and irritable, moderate sedation, such as rectal seconal (dosage 1/10 grain per pound body weight) is helpful in carrying out a non-traumatic spinal puncture.

Once the presence of meningitis is established, adequate therapy should be instituted immediately. If the direct smear does not reveal the etiological organism with certainty, I feel it is justifiable to institute a combined therapy of penicillin, streptomycin, and sulfadiazine in adequate dosage while awaiting the culture reports. The advantage of early therapy outweighs the danger of unnecessary medications. When the causa-

tive organism is established by the culture reports, the unnecessary drugs should be discontinued. In the infant rapid changes in water and electrolyte metabolism makes early parenteral electrolyte and fluid administration as important as chemotherapy to prevent irreversible changes in the tissue fluids. Specific serum, like Alexander's serum in haemophilus influenzae meningitis, is particularly important in the infant. Frequently, blood transfusions are an aid.

The use of intra-spinal therapy has become again a matter of debate since the introduction of penicillin and streptomycin. My own opinion is that intra-theal therapy is usually unnecessary in the treatment of the acute meningitides. The inflamed meninges permits adequate filtration of the sulfa drugs, penicillin, and streptomycin. The introduction of these drugs intrathecally may add chemical irritation to an already irritated meninges. Frequently repeated spinal punctures unnecessarily disturb an ill patient.

In the newborn the need for early diagnosis and treatment is even more acute since irreversible changes occur early in the central nervous system. The early diagnosis is made more difficult because of the more frequent incidence of similar clinical symptoms due to cerebral anoxia and birth injury with or without gross hemorrhage. When there is reasonable doubt, spinal puncture should not be delayed.

The following three case histories illustrate some of the points made above:

CASE 1: B. P., a three-month-old male infant weighing nine pounds was first seen on the evening of January 19, 1949, with a two day history of fever and irritability. He had been a premature baby weighing four and a half pounds at birth. The baby appeared to be critically ill. Temperature 103.4 rectally. There was marked irritability and apparent muscle tenderness. No bulging of the anterior fontanelle, no nuchal rigidity, and no pathological or deep reflex changes were discovered. Taché cerebrale was present. The remainder of the physical examination was normal except for a paroxysmal tachycardia with no other cardiac abnormalities. When the heart rate increased to

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180 per minute or more, the infant became pale, starry eyed, and perspired profusely. These attacks lasted from one to two minutes. Since physical findings did not explain the clinical picture, a spinal puncture was done to complete the examination. The spinal fluid was opalescent and on standing formed a definite pellicle within 10 minutes. The cell count was 120 with 75 percent neutrophils. A direct smear revealed a few suspicious lancet shaped diplococci. Spinal fluid sugar was negative. The protein was 100 mg per cent. Cultures were made. Because of some question about the organism on direct smear, subcutaneous sodium sulfadiazine, and intramuscular penicillin and streptomycin were started while awaiting confirmation from the spinal fluid cultures. The next morning the infant appeared to be considerably improved. He was less irritable and began taking his formula. The paroxysmal tachycardia had disappeared. The 20 hour reading on the culture revealed pneumococcus and then streptomycin was discontinued. In 36 hours the temperature was normal and the infant continued to improve. Sulfadiazine was stopped after 13 days; penicillin, after 20 days. The infant was discharged as cured on the 23rd day.

CASE 2: J. F., an 11 month old infant was seen at home on January 8, 1947, because of fever of one day's duration up to 104. He did not appear ill and the physical examination revealed no abnormal findings. Symptomatic treatment was advised and the possibility of Roseola Infantum was considered. He was seen again the next day with no change in his physical findings except that he did appear to be ill and was very irritable. There were no abnormal neurological findings. He was hospitalized. When the white count was found to be 12,500 with 68 percent Neutrophils, the diagnosis of Roseola was discounted and a spinal tap was done. The spinal fluid was cloudy with 3100 cells, 85 percent Neutrophils. The spinal fluid sugar was 20 mg per cent and protein, 100 mg per cent. Direct smear showed Haemophilus Influenzae and this was confirmed by culture. Streptomycin, Sodium Sulfadiazine, and fluids were started. Twelve hours after adequate hydration and chemotherapy had been started, 75 mg of diluted Alexander Serum was given by slow intravenous drip. Delaying the administration of the serum while using chemotherapy and adequately hydrating the patient, decreases the likelihood of a severe intracranial reaction to the serum. The patient gradually improved and

48 hours after starting streptomycin and sulfadiazine, the temperature was normal. At this time, the patient's blood showed an excess of antibody for the Haemophilus Influenzae bacillus grown on culture. Spinal fluid obtained on the third day of therapy was clear with normal cell count, negative culture, and spinal sugar of 52.5 mg per cent. Sulfadiazine was stopped on the eighth day of treatment and streptomycin on the ninth day. He was discharged as cured 14 days after beginning treatment.

CASE 3: J. B., a seven-month-old white female was first seen on April 19, 1948, with a 36 hour history of fever up to 105 rectally. She had been a premature baby weighing 2 lbs. at birth. The baby appeared to be acutely ill, irritable and somewhat drowsy. Physical examination revealed no abnormal findings other than some slight bulging of the anterior fontanelle and a few mucoid rales in the left lower lobe of the lung. X-ray of the chest was negative. The white blood count was 12,400 with 54 percent lymphocytes, ruling out Roseola Infantum. Because the findings on physical examination could not account for the clinical picture of high fever, irritability, and a questionably bulging fontanelle, a spinal tap was done. The spinal fluid was only faintly clouded but revealed 86 cells with 98 percent of them lymphocytes. The spinal sugar was 76.5 mg per cent; the chlorides, 830 mg per cent. A direct smear revealed no organisms. Penicillin and Sodium Sulfadiazine were started. The spinal fluid culture revealed no growth. In 24 hours the temperature fell to normal and the clinical picture showed marked improvement. Convalescence was uneventful. A tentative diagnosis of Acute Benign Lymphocytic Chorio-Meningitis was made. Other possible diagnoses that were considered included Poliomyelitis (abortive type) or Serious meningitis.

In conclusion, it is the purpose of this paper to re-emphasize the importance of considering the possibility of meningitis in any infant who appears acutely ill when careful physical examination offers no adequate explanation for his apparent illness. Particularly when unexplained toxicity is associated with marked irritability, restlessness, drowsiness, or convulsions, a spinal puncture should be done and done early, for the danger of delay in instituting early adequate therapy is far greater than the questionable risk of an unnecessary spinal puncture.

"I'VE FELT THIS WAY SINCE MARY WAS BORN"*

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It is not a facetious attempt on my part in selecting this title — but merely to emphasize the first remark in the history of a great number of my patients at their first interview.

Complete restoration to health after confinement is one of the aims in the care of pregnant and puerperal women. This is of prime importance to the mother, her child and her household, and often to the community as a whole.

In 1946, the maternal mortality rate was the lowest yet recorded for the United States; 5,473 mothers died as a result of pregnancy and delivery, excluding abortion. In 1946, the mortality for Oklahoma was 90, and in 1948, there were 54. Any physician knows that maternal mortality statistics reveal only a small part of the damage of partuition and that there is in addition an incalculable amount of unreported and often untreated injury and ill health. There is no available accurate statistical data to measure the extent of this disability, serious or slight, immediate or remote.

The delay in seeking medical advice for many of these conditions is often due to the patient's attitude in feeling that such symptoms are a part of the discomfort that pregnant and puerperal women must endure, while others purposely conceal their distress in fear that complaint will render them subject to additional suffering by having to undergo instrumental investigation or surgery. Overwork, the family's dependence upon the mother, and her economic status, are other dominant factors.

It is the purpose of this discussion to enumerate and discuss the treatment of the more common conditions which explain why so many patients "have not felt the same since Mary was born".

Many of the complaints attributable to partuition are amenable to medical treatment and simple office procedures rather than major gynecologic surgery. Another large group are the result of emotional in-

stability; the feeling of inadequacy to care for the child, fear of pregnancy, and lack of rest. Many of the later problems can not be cured by the physician although their etiology and existence may be evident. The physician should ever be on the alert for grave constitutional disease such as tuberculosis, etc.

In considering the various conditions responsible for the puerpera's symptomatology I shall take them up in the order of their frequency in my experience.

1. Fatigue
2. Backache
3. Leukorrhea
4. Rectal symptoms
5. Urinary symptoms
 - (a) Stress incontinence
 - (b) Pyuria
6. Varices

Fatigue: After exclusion of loss of sleep— anxiety and overwork, one looks for a physical explanation. Anemia has been the most common cause. The incidence of a definite anemia in this group has approximated 25 percent. Iron deficiency appears to be the major cause in the majority of cases, but nutritional deficiency particularly an inadequate intake of protein may be an important contributory factor. It is seldom necessary to prescribe a more expensive hematinic than some form of Fe SO_4 . If the blood picture does not respond, more careful hematologic studies are indicated, especially cell volume, hematocrit and studies of stained smears. Endocrine imbalance, particularly hypothyroid states may explain some cases of fatigue.

Backache: This has long been one of the most prominent symptoms in the gynecologic triad. The causes are many, and too often discovered after surgical correction of uterine displacement has failed to relieve the symptom.

Restoration of tone to stretched abdominal and pelvic muscles is an important part in the care of puerperal women and in the prevention of backache and lower abdominal discomfort. Adequate rest is essential. Some

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relief is afforded the first few hours by a supportive abdominal binder — later — muscle tone of abdominal and pelvic tissues is enhanced by corrective exercises in bed. Abdominal exercises should be continued for several weeks. Lumbo-sacral and sacro-iliac strains may occur. Particular attention should be exercised during delivery concerning posture and the placing of the patient in stirrups, especially when anesthetized. Proper shoes and support of flat tarsal and metatarsal arches cures another large group of puerperal backaches.

Retro-displacement of a subinvolted uterus is easy to diagnose and its degree of importance may be determined by reposition of the uterus. This simple procedure is readily done in most cases by means of the Kustner maneuver. Maintenance of its normal forward position by means of a Hodge pessary will hasten involution and relieve chronic passive pelvic congestion. It must be remembered that the supportive ligaments involute only during the puerperal period, hence, the wisdom of early reposition. A pessary will no more shrink a lax late puerperal round ligament than will a soaking in "Lydia Pinkham" or other alcoholic nostrum restore a worn garter to its original pristine freshness.

Surgical utero-ovarian suspension is definitely indicated in cases in which symptoms recur after removal of a pessary, providing the symptoms justify surgical correction. A properly performed suspension of the Gilliam-Crossen type does not preclude future labor and the retro-displacement should not recur.

Leukorrhea: Constituting one of the most common symptoms in gynecology, it is particularly prevalent in the puerperal period. Great advances have been made in the past two decades in recognizing the role of normal vaginal physiology, vaginal Ph, flora, etc. Some of the more common pathogens disappear by changing their environment by acid douches, and carbohydrate suppositories. There is reasonable evidence that erosions are less common when a normal vaginal Ph is restored early in the puerperium. This may be aided by use of acid irrigations, jellies, or suppositories.

Specific infections, fungus and parasitic infestations are now better understood and their treatment more satisfactory. Time does not permit a detail discussion of their diagnosis and therapy.

The so called "post-partum cervix" most commonly seen is a responsible factor in

leukorrhea, backache, lower abdominal discomfort and often vesical symptoms. The picture is usually that of laceration of varying degree, eversion and erosion. Later, cystic degeneration is a common aftermath and may result from prolonged chronic infection, or injudicious therapy with either chemical or physical coagulants.

The cervix should be routinely inspected and all severe erosions or suspicious areas biopsied. We do not feel that vaginal cytologic stains are accurate enough at the present time and their chief value is in screening large groups — which is impractical from the standpoint of both time and expense.

We do not recommend thermo-cautery or electro-coagulation earlier than the eighth post-partum week, then repeated light cauterization or coagulation at intervals of four to six weeks. We never use anesthesia except for conization of the cervix and this valuable procedure is used only in extensive cervicitis of long standing. Topical anesthesia of the cervix has been unsatisfactory in our experience.

Adequate follow-up in all cases cauterized, particularly those involving the endocervix is imperative. We see too many cases of acquired cervical stenosis.

DeLee years ago described the clinical picture of "Parametritis Postica". This term is descriptive of those unfortunate women with a severe chronic cervicitis with tender and indurated utero-sacral ligaments. There is usually an associated uterine retro-displacement with sub-involution and marked chronic pelvic passive congestion. Clearing up the cervical infection, reposition of the uterus, and pelvic heat in the form of diathermy offers dramatic relief.

Urinary Symptoms: Symptoms referable to the urinary tract are common and are more frequently seen in the multipara. The most common etiologic lesions are: 1. Urethral stricture from traumatic delivery, 2. Cystitis and trigonitis, and 3. Stress incontinence. The latter symptom is that form of urinary leakage which occurs on any increase in intra-abdominal pressure, as may result from coughing, sneezing, or laughing; though we will all agree that "they have little to laugh about".

Soundings of the urethra; study of catheterized specimens for routine urinalysis, sediment stains, or culture offers diagnostic aid in most instances. Endoscopy and cystoscopy with or without pyelography is indicated before recommending cystorrhaphy or other

plastic procedures. We prefer to postpone anterior colporrhaphy until after the patient has had her intended family. We never operate asymptomatic cystoceles unless there is an associated uterine prolapse.

More careful observation of the post partum bladder, careful checking for residual urine and appropriate urinary antisepsis will eliminate the larger per cent of late postpartum urinary symptoms.

Rectal Symptoms: Internal and external hemorrhoids, rectal fissure, and rectocele constitute the majority of cases with rectal complaints. They are seen in almost direct proportion to the patient's parity. Careful prenatal and intra partum care will minimize rectal pathology. Avoidance of constipation, the use of anal suppositories, etc., are of distinct value. The avoidance of unnecessary rectal examinations, the more general use of episiotomy and perineal forceps has greatly reduced the number of puerperal hemorrhoids. The majority of rectal complaints can be relieved by simple office management. Hemorrhoids and other distressing rectal lesions frequently accompany perineal injuries. They are often independent of laceration, but may develop coincidentally. Careful judgment is indispensable in surgical management of these cases; some are relieved by perineal repair alone; while others demand additional surgical dissection of the hemorrhoidal vessels. One should shun operation upon hemorrhoids without repair of the perineum in case of extensive co-existent laceration.

Varices: Existing varicosities tend to enlarge and new ones appear during pregnancy and may often cause considerable pain and annoyance. Pathologic dilation is probably due to a hormonal exaggeration of previously weakened muscular elements of the vein wall. Since markedly dilated veins tend

to disappear during the puerperium, treatment during pregnancy should be symptomatic, including postural drainage and support with bandages. It is more desirable to evaluate venous wall damage later, when a more reliable estimate of necessary operative therapy can be made.

During the puerperium patients may have troublesome symptoms; edema, leg ache, etc. Bandages or elastic stockings may afford much relief. Symptoms from varices in the thigh are frequently alleviated by support of the veins of the lower leg.

All cases with troublesome symptoms should be evaluated in reference to surgery. Mengert has made a practical suggestion for supporting veins of lower extremity. The use of several pairs of ordinary silk stockings will often provide adequate support. The heels and toes are cut from three or more pairs of discarded stockings, and all of them put on the affected leg. Runs and defects will not be noticed, especially when they are covered with a good pair of stockings. Apparently there is sufficient elasticity in the combined effect of the several stockings to provide support. Our patients, too, have been delighted with the simplicity, unobtrusiveness and benefits of this simple method.

Dramatic results are obtained in properly selected cases by ligation and sclerosing procedures. The use of the simple diagnostic tests to determine competence of the valves of deep veins is mandatory in selecting cases to be operated.

SUMMARY

1. A brief discussion of the most common puerperal complaints, their diagnosis and management is presented.

2. Evaluation of emotional, social, and economic problems has been emphasized.

TWENTY-FIVE YEARS AGO

DR. D. D. ROBERTS, Enid, has been elected President of the Enid Kiwanis Club.

DR. J. E. COTTERAN, Byars, has removed to Wynnewood, where he has established his practice.

DR. WALTER HARDY, Ardmore, addressed the Lions recently, on the recent advances in the medical sciences.

DR. F. L. WORMINGTON, Miami, had a Ford coupe stolen from in front of the Baptist Hospital in November.

OTTAWA COUNTY MEDICAL SOCIETY held a "Better Acquainted Banquet" on December 17 at Dr. George DeTar's home at Miami.

PEDIATRICS IN GENERAL PRACTICE*

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The general practitioner does the bulk of pediatric practice in the United States, and upon his shoulders rests the responsibility as well as the privilege of directing the health of our nation's children.

The American Academy of Pediatrics began in 1944 the stupendous task of investigating child health facilities in the United States. This three year study, assisted by grants from the U. S. Children's Bureau and U. S. Public Health service, has recently been completed at an expense of approximately one million dollars. It has been published by the Commonwealth Fund in a two volume report entitled Child Health Services and Pediatric Education.

The attempt was to answer "What is?" concerning the status of child health in the United States. Not since the White House Conference some 20 years ago has there been such a rich source of information pertaining to the child health of our country.

In general, the report would say that within few fields of human endeavor has such remarkable progress been made within the last generation, as in medical science. New diagnostic techniques and new life saving drugs have increased the opportunities for health and length of life. Never before has the infant mortality of the U. S. been lower or childhood disease more under control.

A continuing committee for investigation of child health facilities will seek the answers, "What to do about it?" These are the deficiencies which are most obvious in our national program of child care. First in importance is education. The ultimate care of the individual depends upon the character and training of the physician. No matter what the facilities available, their value depends entirely on the skill and judgment used in their application. Educational opportunities for doctors who care for children are inadequate. Many men go into a general practice with little or no pediatric training. Some medical schools have no department of pediatrics, and some devote less than 50 hours to study in this field. Many child health agencies, endowed by private

gifts, such as the Rheumatic Fever and Infantile Paralysis Foundations, are extremely wealthy, but have not the trained personnel to carry their advantages to the grass roots, our large rural areas. In fact one broad generalization of the survey is inescapable. Children in outlying counties, far removed from medical centers found in metropolitan areas, do not receive the full benefits of modern medical care.

The poll of individual physicians is one of the most accurate ever made in our profession. Over 60 percent of men in practice answered the questionnaire. These are the facts most pertinent to us in general practice. One-third of all general practice is pediatrics, that is one-third pertains to patients under 15 years of age. We find that 75 percent of pediatric care in metropolitan areas is rendered by the general practitioner, and in the rural or remote counties which contain 13,000,000 or one-third of the nation's children, the general practitioner has 98 percent of pediatric responsibility. In these rural areas, where distances between patients are greater, facilities are poorer. There are one-third as many general practitioners per 1,000 children in the rural areas as in the metropolitan areas. There are one-half as many hospital beds in the country as in the city. With these handicaps, and noting that he does not claim to have special training, nor have specialized consultation at his immediate command, the country doctor's statistics do not compare too unfavorably with his metropolitan brother. For the five year period 1941-1945, the infant mortality for rural areas was 47 per 1000, in the metropolitan areas 38 per 1000.

The quality of a pediatric practice is in direct proportion to its per cent of well child visits. Here the greatest opportunity presents itself for preventive medicine. Perhaps not unjustly was the medical profession criticized adversely for the large number of preventable and remediable defects found in the draftees of the past world war.

Whose responsibility, if not ours, to guide and direct the development of our country's youth? We have the years that count, the new born and pre-school. In fact the gen-

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eral practitioner has supervision of the pre-natal child, and of his parents, premarital and before conception. Health defects should be anticipated and avoided.

The family doctor is the key figure here, and it is our fault if health agencies come in to correct that which we should have prevented.

Dr. Martha Eliot, for 25 years Associate Chief of the Children's Bureau, and Dr. Leona Baumgartner, who took her place on June 1 give as a most pressing need of the Children's Bureau, "The Adoption of the proposed school health program, with initial intensive efforts on the first years in school so that health defects can be caught and remedied as soon as possible".

Again referring to the survey of child health facilities, we find that 26 percent of the general practitioner's pediatric practice is devoted to well child supervision, while 54 percent of the pediatrician's calls are from well children.

We believe the general practitioner becomes so involved with therapy that the importance of prevention fades from his mind. At this time 25 percent of our population is over 45 years of age and requires 50 percent of medical care. By 1980, 52 percent of our population will be over 45 and will require 80 percent of medical care. Far sighted care of degenerative disease is to begin with prevention, by proper supervision of the new born and pre-school child.

The man in general practice has a wide variety of interests and great demands upon his time. He will not have time for the well child, unless he is convinced of the value of such service, and establishes a definite program whereby he will have regular visits from his Pediatric patients without regard to illness. This program should encourage mothers, who also must be convinced of the value of such a service if it is to be successful.

We have worked out such a plan in our town of 1300 population, located in one of the choice agricultural communities of our state.

During the war years we found our practice so hectic and hurried that we were losing our babies. We had no time to examine them and counsel with their mothers. Immunizations were neglected. Our solution was to give office hours 9 to 12 each Friday morning, exclusively to our well babies. In the five years that we have followed this plan our Friday morning sessions have real-

ly developed into a well baby and pre-school child clinic. We are pleased with our results. The mothers are pleased. The community is pleased.

We see an average of 10 children each Friday morning. A great majority are under two years of age. Whether due to our lack of interest or lapse of time between visits in the later years, we lose many of them.

Our routine is to strip, weigh and measure each child, examine for physical defects noting especially posture, heart, lungs, eyes, ears, nose, throat and teeth. We talk to the mother while examining the child, obtaining information as to the adjustment of mother to child and child to its environment. It is our opportunity to improve attitudes as well as methods of handling the infant. Knowing family traits as only a family doctor can, genetic inheritance may be observed, and intelligent effort put into assisting the new individual to make a happy, healthy adjustment to the home.

The time schedule for visits are three weeks, six weeks, three months then monthly until one year of age. In the second year the visits are requested every three months then every six months until school age. We would then like to follow up with a pre-school check up continuing through adolescence. As I have said we lose many of them after the first two years.

Our immunization program may vary with the child's development, but we usually start our series of D.P.T. Alhydrox at four months and finish the series of three doses at six months. Smallpox vaccination is given anywhere from the eighth to the twelfth month. We give a booster D.P.T. Alhydrox at two years and pre-school. We also re-vaccinate pre-school. We have no definite plan for typhoid fever immunization, mainly giving it by request.

In 1948, we completed 50 Diphtheria, Pertussis and Tetanus immunizations with D.P.T. Alhydrox, nine Diphtheria and Tetanus immunizations, using Diphtheria and Tetanus Toxoid, and gave 22 Smallpox vaccinations.

In conclusion, we have stressed the pediatric responsibility of the general practitioner calling attention to the fact that from two-thirds to 98 percent of pediatric care is given by the general practitioner, depending upon the location of his practice. Also we note that one-third of general practice consists of child care. Our greatest needs are improved educational facilities for doctors

who care for children, and an increase in personnel with improved hospital facilities in the rural or isolated areas where one-third of our child population lives.

Because of the great opportunity for preventive medicine offered and neglected in well child supervision, this has been stressed, with a method presented for working out such a program in a general practice.

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THERAPEUTIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by The Departments of Pharmacology and Anesthesiology

INTRAVENOUS PROCAINE

HAROLD G. MUCHMORE, M.D., HOWARD A. BENNETT, M.D.

AND ROBERT F. REDMOND, M.D.

DOCTOR MUCHMORE: Procaine was synthesized by Einhorn in 1905 and during the 30-year period that followed there were many warnings in the literature about the dangers of procaine intravenously. Lundy in 1940 used procaine to treat the pruritis that accompanies jaundice, and since that time there have been many reports of various uses of intravenous procaine. In the last three or four years it has come into quite considerable prominence and is used for many widely varying situations encountered in medicine. Dr. Bennett, will you tell us some of the ways intravenous procaine is being used today.

DOCTOR BENNETT: In general we can say that the effectiveness of procaine is based on the permeability of capillary membranes to colloids and ions, especially in irritated or injured areas. Procaine is also used in conditions in which there is vasospasm secondary to irritation. We will briefly run through several of these conditions where it can be used. There is quite a long list.

Many traumatic conditions will respond favorably to procaine. It has been found that procaine is concentrated some seven to eight times in the injured tissue as compared to normal tissue. The action therefore is probably peripheral, i.e., at the site of the injury. For example, in fractures prior to reduction there is pain. Intravenous procaine is frequently useful in alleviating this pain at the site of the fracture. After reduction considerable analgesia and comfort in the

fracture site is afforded. It is not satisfactory for actual reduction of a fracture however. As well as alleviating pain procaine tends to decrease edema and vasospasm. It is also thought to facilitate earlier healing of fractures. Intravenous procaine has been found beneficial in post-reduction arthralgia where the patient may have a painful joint six or eight months following reduction of a dislocation. The earlier it is used after a dislocation, the more beneficial it seems to be. In sprains during the acute condition, the reduction of edema, the reduction of pain, and the facilitation of resolution of the inflammatory process is hastened by the use of intravenous procaine, and with the comfort also provided by this drug, a more rapid recovery results. Certain mild fasciitic conditions of the shoulder and back will respond to intravenous procaine. Reflex sympathetic dystrophy such as causalgic states and phantom limbs will sometimes respond favorably to intravenous procaine. Rheumatoid arthritis in a chronic or subacute form will be alleviated partially, sufficiently perhaps in extent to allow further application and progress in the way of physical therapy and rehabilitation. It also reduced instances of contracture. In some neuritides such as painful herpes zoster during the exudative stage and shortly thereafter, the response is frequently favorable to the use of intravenous procaine.

In vascular disease, particularly where vasospasm is present and a factor in the

propagation of the pathologic picture, for example secondary to thrombophlebitis, good results are achieved much in the same fashion as in sympathetic block. In other words, by interrupting the peripheral portion of the reflex arc which is maintaining vasospasm, the difficulty is at least partially eliminated. Other similar examples are trench foot, and in vasospasm secondary to emboli. In other vasospastic conditions, such as pulmonary or coronary infarction, secondary to embolus or in the coronary artery whether primary or due to some other type of occlusion, it may be useful. It has also been used, and with some questionable success, in cases of anuria associated with lower nephron nephrosis. Again this is an application of the release of vasospasm since it is thought that in the earlier stages of this type of renal disease there is spasm in the arterioles supplying the glomeruli and other portions of the cortical nephrons which contribute to the anuria. Those are a few of the conditions in which it has been used. There are others, but of lesser importance.

DOCTOR MUCHMORE: What about the general technique of administration? How is procaine given intravenously?

DOCTOR BENNETT: Usually a solution containing 1 mgm. per cc. is satisfactory. The drug can be dissolved in five percent glucose in water, in normal saline, or in a mixture of saline and glucose. It has also been used satisfactorily in Amigen solution. Usually 500 cc. is given at a rather rapid rate, depending upon the patient's response and whether he gets untoward reactions; or the desirable feeling of warmth and perhaps some dizziness and a sensation that the walls of the room are moving, which is about the proper rate to give the desired therapeutic effects. Usually 500 cc. should be given in 20 to 40 minutes, depending on the patient's ability to take it.

DOCTOR MUCHMORE: In general how long do the effects of that infusion last?

DOCTOR BENNETT: This depends on the condition for which it is given. For example, in an acute sprain, one injection may be satisfactory to carry that patient through to recovery. In a condition where the patient has thrombophlebitis with vasospasm the beneficial effects may last for 24 hours; it may last a shorter period of time. In burns for example where it may be given for analgesia, the effect may last for three or four hours. The condition somewhat dictates the duration of the beneficial effects.

DOCTOR MUCHMORE: Dr. Redmond, we have discussed the application; what is the pharmacology back of intravenous procaine. We are all familiar of course with its use as a local anesthetic, but what about the intravenous use?

DOCTOR REDMOND: Dr. Bennett has given us one key as to the way intravenous procaine has its effect in injured tissue, because in early inflammation there is an exudation of many of the cellular, colloidal and fluid constituents of the blood across the vascular barrier into the injured region. By this means there is, as he stated, a concentration of procaine in the injured region which is much higher than that in normal tissues. Thus the highest concentration, and therefore the greatest effect, is at the site of greatest need. This applies however only to certain types of patients in which intravenous procaine is used. There has been considerable interest about intravenous procaine since it was first used by Lundy and has later been used by many others. At the present time we seem to be getting perhaps a little closer to what actually goes on. It was felt for many years that procaine was detoxified in the liver. Lief, Brodie and their co-workers have devised tests for procaine, and for the hydrolytic products of procaine which are para-amino-benzoic acid and diethylaminoethanol. Procaine is an ester of these two substances, and it was shown by Legge and Durie in 1942 that there is a procaine esterase in the blood. Procaine esterase is apparently made in the liver and indeed the concentration of this esterase has been suggested as a test for liver function. Diethylaminoethanol has not been found as strong or as effective in many conditions as is procaine itself, in spite of the fact that in vitro with procaine added to a sample of blood in a test tube, within a period of two or three minutes practically all of the procaine has been broken down into these two constituent parts. It has also been found that only about one percent of the administered procaine is excreted as such; that about 70 to 75 percent of the drug can be accounted for by para-amino-benzoic acid or one of its conjugation products excreted in the urine. Only about 20 to 25 percent of the diethylaminoethanol is excreted. For these reasons it is felt that probably diethylaminoethanol is in some way connected with the therapeutic effects of procaine. We should interject at this point that if the inflammation is of bacterial origin the para-amino-benzoic acid will nullify some of the

effectiveness of the sulfonamides.

DOCTOR MUCHMORE: What about the old fat solubility theory. Does that enter in here?

DOCTOR REDMOND: It is known that procaine as it is usually administered, for example as the hydrochloride, is broken down by the alkalinity of tissue to procaine base which is then fat soluble, but the old idea of fat solubility being the answer to the effectiveness of any analgesic or anesthetic agent is probably not true. I think there is more evidence on the side of an interference with some enzyme system — just what enzyme system I am of course not prepared to say — but we do know that there is evidence for procaine having an anti-acetylcholine effect. There is an argument about whether it has an anti-histamine effect, and as you will remember Dr. Paul Smith at an earlier therapeutic conference mentioned the possible role of histamine in the production of pain. Probably if fat solubility has anything to do with the action of procaine, it is only as a means of the drug reaching the nerve fiber rather than this being a specific action.

DOCTOR MUCHMORE: I mentioned all of the warnings that had preceded the use of intravenous procaine because of the toxicity. Is not intravenous procaine toxic, or were all of these ideas wrong. What about the toxicity of intravenous procaine?

DOCTOR REDMOND: Most of the toxic effects of procaine will certainly be seen if procaine is administered intravenously. That is one of the things Dr. Bennett mentioned. It is given in the amount required to do what you want to do to the patient without producing toxic effects. That is the key to the administration of any drug. If it is given too rapidly intravenously, certainly many of the toxic effects will be seen. Probably the most common one which will be seen in a situation like this is central nervous stimulation resulting in convulsions — the most common toxic symptom no matter what way it is given. Then there is another type which is probably a sensitivity to procaine. In this type there is a general collapse of the patient, mostly cardiovascular, in which the patient goes into deep shock, stops breathing and dies. Death occurs rapidly. It is quite a frightening thing for everyone involved. This occasionally happens, but is fortunately rare, and apparently intravenous administration is not required to produce it. Dr. Muchmore tells of a 19-year old girl with a painful scar who had three intradermal

wheals made along the scar and who died within a very few minutes — theoretically all the drug was given intracutaneously. In my own experience I have seen one rather unusual reaction which is mentioned occasionally. This was an asthmatic type of reaction; again a sensitivity, and also very frightening. Some authors suggest skin testing before it is given, which might not be a bad idea but again the skin test itself, if the patient is sensitive enough, might cause death. Giving the correct amount of any drug is the answer to avoiding ordinary toxicity. Drug sensitivity is an everyday risk in medical practice.

DOCTOR MUCHMORE: I understand the toxicity is largely a matter of dose and the speed of administration. What do animal studies indicate as to the limits of toxicity?

DOCTOR REDMOND: In dogs 60 mg. per kilogram per hour is said to be the fatal dose. In cats it has been shown that one fatal dose of procaine can be metabolized or detoxified every 20 minutes. It is felt that this is probably true in humans, and that provided the normal amounts of procaine esterase are circulating in the blood, one fatal dose of procaine will be detoxified in 20 to 30 minutes.

DOCTOR MUCHMORE: Then theoretically liver damage might lead to greater toxicity or unexpected toxicity. Is that right?

DOCTOR REDMOND: Probably severe liver damage or even moderate liver damage either contraindicates or lowers the dose which will be administered to a patient. It is particularly interesting in this regard that it is used frequently for the pruritis of jaundice. It should probably be used rather carefully here because these patients frequently have liver damage.

DOCTOR MUCHMORE: Dr. Bennett mentioned that it is only useful for about four hours in the relief of some types of pain, and yet in other situations the effects may last for quite a long period. I believe in early care of urticarial wheals, if the patient is given intravenous procaine, that the wheals disappear like snowballs in the sun. Is that the same action or is that a different action?

DOCTOR REDMOND: There is considerable discussion about what that action might be. Many of the diseases in which procaine is used are vascular in part at least. Again we come back to the question of a possible anti-histamine or anti-H substance effect; or is it an anti-acetylcholine effect? Perhaps it is direct effect on the blood vessels by some

means. In rheumatoid arthritis there is a vascular alteration intimately related to the inflammatory reaction, so that it is quite possible that many of the effects we see are due either to direct action on the vessel by one means or another or by relief of muscle spasm, and certainly all of these things are involved in a vicious cycle. If there is vasospasm and muscular spasm, these tend to produce pain which tends to produce more vasospasm and more muscular spasm. Once this circle is broken the patient may be relieved for several days.

DOCTOR MUCHMORE: The toxic effects may be very serious, as we have seen. Dr. Bennett, can they be prevented; what are the prophylactic or therapeutic measures that can be taken?

DOCTOR BENNETT: They probably can't be completely prevented. It is felt that the use of a barbiturate as a prophylactic against such reactions given before the administration of procaine intravenously lowers the therapeutic response significantly. Enough that it is recommended that a barbiturate not be given. The best prophylaxis of course is experience, and experience is obtained by proceeding very cautiously. We might mention at this point that careful, continuous observation during the administration of intravenous procaine is mandatory, therefore once an intravenous infusion is started someone should be with the patient at all times so that if any untoward symptoms develop, the infusion can be discontinued and proper corrective treatment instituted if needed. For example, if neurological evidences arise such as twitching of the face and hands, substernal oppression, or even convulsions, a soluble barbiturate should be given intravenously after the infusion of procaine is discontinued. Sodium pentothal, sodium amytal or nembutal in solution are quite effective and small doses should be given in succeeding increments sufficient to alleviate the convulsion, and no more. In other words, a massive dose of a barbiturate should not be injected injudiciously. Some provision should be available, perhaps a pharyngeal airway, to give the patient an airway if he is in distress. Also it is desirable to have some means of providing artificial respiration if that should be necessary. If the distress is more of a circulatory nature as evidenced by a slow pulse rate and a hypotension, probably any of the simple pressor drugs such as ephedrine or neosynephrine in small doses intravenously will be satisfactory.

DOCTOR MUCHMORE: In local anesthesia it is always recommended that a barbiturate precede the injection, but you say it is not given routinely before intravenous procaine.

DOCTOR BENNETT: That is correct. It seems to diminish the success of the therapeutic response.

DOCTOR MUCHMORE: Let us return to some of the specific uses and discuss them in a little more detail. We have a question from a student as to the relative value of intravenous procaine over or under locally injected procaine in the treatment of sprains or fractures. Is it preferable, is it better?

DOCTOR BENNETT: Those who have had experience with it say that the intravenous administration is far superior to the local injection of procaine into the sprained area. Our own experience is insufficient for a definite answer, perhaps we should watch and wait and see.

DOCTOR MUCHMORE: Is intravenous procaine useful in augmenting anesthesia or increasing the usefulness of a given anesthetic agent during regular anesthesia in the operating room. Are there any unusual situations that might arise there?

DOCTOR REDMOND: A great many people have felt that it was a useful adjunct, but more recently a paper has been published which states that certain types of anesthetics are not particularly benefitted by intravenous procaine. Special reference is made to pentothal-curare anesthesia, where it is felt that neither the sedative effect of the pentothal, along with its anesthetic effects in larger doses, nor the relaxing effect of curare is as marked in the same dosage when intravenous procaine was used, and certainly this is not against our previous statements of the toxicity of procaine where one sees central nervous stimulation in some cases. It is useful in the operating room in many other types of things which I am sure Dr. Bennett will mention later. There is another place where intravenous procaine is said to be quite dangerous, and that is in any situation where prostigmin (brand of neostigmine) is used. It has been found in animals that the fatal dose of procaine is very small in animals pretreated with neostigmine. This apparently points again to the idea of some relationship between acetylcholine, choline esterase, procaine, procaine esterase, and other unknown factors.

DOCTOR MUCHMORE: What about the use of intravenous procaine in polio. I believe it has been used over at Children's Hospital

some. Why is it used? For what purpose?

DOCTOR BENNETT: I speak from word of mouth and not from personal experience, but it has been used in polio, particularly in the acute stages, to alleviate muscle spasm. It has a lissive effect, so called. In other words, the patient does have muscle spasm in the afflicted areas and also in areas which are not involved by the disease. If you can relieve the muscle spasm in the diseased area, the other area likewise is alleviated. The patient with a very high level of involvement may breathe easier. Another example of its use in polio is in the subacute and chronic stages. It seems to speed the relief of spasm, thus facilitating physiotherapy and rehabilitation. What its actual application in the treatment of poliomyelitis will actually amount to in the future I cannot say. It is another situation where further experience will give us an answer. It does show some promise.

DOCTOR MUCHMORE: Intravenous procaine will relieve spasm and will also relieve pain. Of course some of the pain is due to spasm and that is relieved fairly well. It is also apparently a fairly good analgesic. Its use has been mentioned in burns. How would you compare it with other analgesics?

DOCTOR REDMOND: It is fairly hard to compare analgesics at all. Pain is a subjective phenomenon and cannot be measured quantitatively without a certain amount of subjective response by the patient, which is always limited by human error. It has been found for example that procaine when injected subcutaneously in one site will produce a generalized, systemic analgesia, which is about equal to that of aspirin. In other words, if we use from 100-800 mgm. as a two percent solution of procaine subcutaneously in one area and test the analgesic potency by using the Wolff, Hardy, Goodell technique of a spot of light on a blackened area of the forehead with pain being produced by the heat of the light, then there is about 30 to 35 percent increase in the pain threshold, so even if it is given in one area the systemic effect is that of an analgesic. To apply intravenous procaine to the particular problem of burns one must consider that there is an area of inflammation with very marked exudation. These people lose large amounts of fluid and plasma through the burned area, so that actually procaine is reaching the site where pain is being produced and it is reaching this area in fairly large amounts. In a case like

this the analgesic effect of procaine is quite marked.

DOCTOR MUCHMORE: What about the duration of the analgesia in subcutaneous methods of anesthesia?

DOCTOR REDMOND: By this method analgesia is not nearly so prolonged as it is with other usual analgesic agents. When it is used intravenously the effect may be prolonged, for example, postoperatively it has been found that the patient may not require any other analgesic for a period of perhaps 24 hours or more if one or two grams is given during surgery. Here again procaine may have selectively reached the tissues where pain is being produced. For this reason we cannot say that that is a systemic effect, but probably a local effect.

DOCTOR MUCHMORE: Dr. Bennett, there have been several papers published recently on the treatment or control with intravenous procaine of cardiac arrhythmias that arise during anesthesia. What about that?

DOCTOR BENNETT: It has most successfully been used in this fashion with agents which derange the cardiac conduction mechanism, namely cyclopropane, chloroform, and perhaps ethyl chloride. It has been found that the administration of procaine intravenously in small doses will relieve a derangement of conduction and facilitate the reproduction of an normal mechanism. Also, in thoracic surgery, where traction reflexes are working with the arrhythmogenic agent, procaine may be used.

DOCTOR MUCHMORE: Is it given intravenously?

DOCTOR BENNETT: Yes, it is given intravenously. Usually 6 to 8 cc. of one percent solution. That is 60-80 mg. in one crack under general anesthesia. That might be a risky thing to do perhaps in a patient who is awake. It might produce neurological evidences of toxicity in very short order.

DOCTOR MUCHMORE: Is it not sometimes applied to the heart directly during chest surgery?

DOCTOR BENNETT: Yes, sometimes it is infiltrated in the reflexogenic areas. For example, the hilar regions of the lung or the pericardium can be infiltrated or the pericardial sac can be filled with a procaine solution. Here its application is thought to be breaking the reflex arc at the peripheral level.

DOCTOR MUCHMORE: Dr. Redmond, in these cardiac arrhythmias have there been any studies on the breakdown products that

you mentioned from procaine. Are they used in controlling cardiac arrhythmias?

DOCTOR REDMOND: Diethylaminoethanol has been used by the same group of workers that I mentioned before. They tried giving it orally and found that it was absorbed almost quantitatively but that it would not apparently reach an optimum therapeutic level. It was found to require very large amounts of diethylaminoethanol, referred to as DEAE, and that by giving it intravenously they could give several grams of this drug in a very short period, and in most of their cases especially in arrhythmias arising from the ventricular area of the heart, for example, paroxysmal ventricular tachycardia and ventricular extra-systole, they found that practically all of these patients did respond nicely to diethylaminoethanol and that they did not observe any severe toxic symptoms. The patients did have a sensation of an unusual taste in the mouth, a feeling of warmth, a feeling of things dancing in front of their eyes, the walls moving, etc., but there were no convulsions observed with a dose required to produce a normal rhythm.

DOCTOR MUCHMORE: Has intravenous procaine ever been used in renal and biliary colic?

DOCTOR REDMOND: It has been used in many types of colic. I have observed two patients who received it for renal colic in which the response was quite satisfactory. About 10 minutes after it was started they were relaxed and went to sleep. The pain returned in about an hour and it was felt that since this method required the constant attendance of a physician, it might be better to use the ordinary analgesics. However a KUB roentgenogram was repeated about two hours after procaine and it was found in one patient that a stone which was visible in the ureter had moved about three inches. Whether it was the intravenous procaine that released the spasm allowing the stone to move, I am not prepared to say, but it is a possibility.

DOCTOR MUCHMORE: What about the use of procaine in acute asthmatic state?

DOCTOR REDMOND: Procaine has been used for asthma. Reports are quite enthusiastic. I suppose there is reason to believe that it might be useful. I think I personally would be a little careful, but in an asthmatic who did not respond to the usual means, it might very well be tried, and I would like to see

it tried. We read about these things in the literature but until we see them used we are a little afraid of them — and rightly so — but after familiarizing ourselves with a new method it may become commonplace.

Another use of intravenous procaine is in acute pulmonary edema. Just what the mechanism is here I am not prepared to say, but I think possibly that it might be an actual anesthesia of some of the neurons involved in the reflex mechanism producing dyspnea.

DOCTOR MUCHMORE: Has procaine been used with any success in tetanus?

DOCTOR BENNETT: It has been tried. The results are not too gratifying. It may be discarded in this disease.

DOCTOR MUCHMORE: We have mentioned several vasospastic diseases, arthralgia, arthralgic states, what about Reynaud's phenomena and Buerger's disease? Is procaine useful in those?

DOCTOR BENNETT: It usually gives only a transitory effect, lasting perhaps two or three hours. It doesn't seem to attack the responsible pathology, and therefore it can give only temporary relief; consequently it is probably of little value.

DOCTOR MUCHMORE: We have covered many new applications of an old drug. It is apparently somewhat useful as an analgesic. The analgesia is not as powerful or as long-lasting as the spasmolytic effect, which may be the more important of the two. Apparently the best results of intravenous procaine have come in those situations where one can relieve spasm, such as in sprains and fractures and in post-reduction arthralgia. Relief is afforded following upper abdominal operations where there is splinting of the chest and a spasm of the chest muscles due to the pain involved in breathing. It is useful in urticaria. It does not seem to relieve pain itself as well as many other agents, unless there is active inflammation with exudation. It is new and we are interested. We have attempted to try it on many things, and in many of the conditions we have listed it may eventually be discarded. As Dr. Bennett indicated, its use in tetanus is already apparently on the way out. Better methods of therapy will be developed for many of the situations we have mentioned, and only time is going to bring out the ultimate place of intravenous procaine in therapeutics.

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RESEARCH IN THE SERVICE OF MEDICINE

President's Page

The October, 1949, issue of National Republic in an article in an article by Francis Head Hacker entitled "Free Poison" carries a statement of deep significance to the medical profession.

"Dr. Rexford Guy Tugwell of the earlier New Deal's 'Brain' Trust, pointed out the intimate nature of the contact between the country's 250,000 doctors and dentists, and then added: 'If we can ever control the medical and dental profession, we will control the thinking of the entire United States'."

This is a great compliment to the members of these two professions but also it is a warning and a challenge — a warning that no effort will be overlooked in accomplishing the desired end and a challenge to us to keep our thinking straight.

You will recall that Lenin said, "Socialized medicine is the keystone to the arch of the socialized state."

When the ominous Health Bill failed of enactment its proponents said in effect that they would divide it into its several parts and pass them one at a time. This is the plan tried in the last session of Congress and no doubt will be renewed at the coming session.

H.R. 6000, which greatly broadens the Social Security base; S.B. 1411, the school children's Health Bill providing medical care to school children up to 17 years of age; and S.B. 1453 which provides for aid to medical and nursing schools and medical education — all of these lead to greater government control and direction. They represent a long step toward greater security with consequent loss of freedom. As security increases, freedom decreases.

Our country was founded upon free enterprise and initiative, freedom of speech, press and worship. Let us not now sacrifice these freedoms for which our ancestors fought and died — that we may have short lived security and final oblivion.

George H. Garrison
President.

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ANNUAL MEETING OPINIONS AIRED IN QUESTIONNAIRE

Response to the recent Annual Meeting Questionnaire mailed by the O.S.M.A. Executive Office has been gratifying as more than half the membership have returned the two page inquiry.

A tally made at Journal presstime indicates that the system now in force of having the Annual Meeting alternate between Oklahoma City and Tulsa is preferred to having the session in the same city each year. A three day meeting had a wide majority over one or two days and the first three days of the week are convenient for most physicians, replies showed.

Outgrowing hotel facilities in Oklahoma City and Tulsa, the Association was faced with the problem of holding the meeting in a hotel without exhibitors, or in a hotel with exhibitors although facilities are not ideal, or a third choice of convening in an auditorium with facilities for meeting places and both commercial and scientific exhibits. The vote was three to one in favor of the auditorium.

Most O.S.M.A. members preferred the second night for the President's Inaugural Dinner Dance with a light program featuring a humorous speech far outdistancing the vote for a scientific, economic, social, or political address. A few of the physicians checked bowling, tennis, skeet shooting, or added stag party or similar diversion, but more than half placed golf first on the "other entertainment" list.

If the questionnaire is an indication, the separate sections on medicine and surgery, and one general session is the best type meeting. The vote for out of state speakers topped that of speakers from Oklahoma. Nearly all answers approved having several scientific exhibits. Showing the trend toward increased emphasis on the general practitioner, papers on general problems of medicine including both diagnosis and treatment tallied more yes's than forums or papers on rare conditions.

Roundtable luncheons on medicine and surgery and demonstration meetings brought increased favorable response and television and movies on scientific subjects and medical and surgical procedures were requested as a new feature if practical.

If outstanding authorities on ethics, income taxes, Americanism, medical jurisprudence, office management, malpractice and other types of insurance, social, economic and political problems were available, a minority of the doctors endorsed including papers on those topics at the Annual Meeting.

THIRD INTERNAL MEDICINE CIRCUIT OPEN IN ONE WEEK

Physicians in Hugo have enrolled 100 per cent at Journal presstime for the third circuit of the postgraduate course in internal medicine by Robert M. Becker, M.D. This southeastern Oklahoma circuit will open the week of January 9. Centers are Ada, Ardmore, Durant, Hugo and Idabel and enrollments have been excellent, the Postgraduate Committee reports.

Designed for the benefit of both the general practitioner and the specialist, all physicians are urged to enroll. Response from the first two circuits indicates that this is one of the best programs that has been given during the past 10 years of postgraduate instruction. The program in internal medicine is the sixth to be offered the physicians in Oklahoma under the auspices of their own State Medical Association, the Oklahoma State Health Department and the Commonwealth Fund of New York.

BLOOD BANK INFORMATION ASKED BY A.M.A.

As a first step in determining the capacity, equipment, personnel, inventory, general processing procedures, and arrangements for emergency cooperation among blood banks, a survey of blood banks has been mailed by the Bureau of Medical Economic Research of the American Medical Association.

A questionnaire has been mailed to more than 1,500 blood banks and 5,000 hospitals which have no blood banks. Certain facts about blood utilization by hospitals are needed to complete the portion of the study being covered at the present time.

In order to simplify the printing and statistical analysis, one questionnaire form is being used for two purposes in preference to two separate questionnaires. To differentiate between the two, the blood bank questionnaire is printed in black and the one for hospitals without blood banks is printed in blue. The identification is shown on the top of the first page of the questionnaire. Blood bank and hospital administrators are urged to return the replies promptly, filling the forms in as accurately as possible, even if it is printed in the wrong color, and not this below your signature.

MOBILE CLINICS, SCHOOLS FEATURE CANCER ACTIVITIES

Final clinic for this season was held in Mangum December 13 by the Mobile Cancer Detection Unit. Other clinics held recently were Holdenville, McAlester and Altus.

From November 7 to 11, the field army held four training schools in Tulsa, McAlester, Chickasha and Enid. A total of 470 attended the four schools with representatives from 57 of the 77 counties. District Commanders presided at the program which was divided into four parts, education, home service, organization, and question period.

BENNETT NAMED CHAIRMAN

Dr. Henry G. Bennett, President of Oklahoma A. and M. College, Stillwater, has accepted the chairmanship for the annual fund raising campaign to be held in April, reports the Oklahoma Division of the American Cancer Society. The National Society has decided to increase substantially the amount to be spent on research during the coming year and this, plus carrying on the local work of the Division, will require more funds than it has been possible to raise before. Representatives of the Society feel confident that under Dr. Bennett's leadership and with the full cooperation of the medical profession and the field army, the goal will be reached.

PRESENTS PAPERS

Three papers were given by Henry H. Turner, M.D., Oklahoma City, at the postgraduate courses of the Chicago Medical Society October 17-29, 1949. Titles of the papers were "Precocious Puberty and Masculinizing Tumors of the Adrenal," "Male Hypogonadism and Infertility," and "Effects of Testosterone Propionate on Spermatogenesis."

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FIVE PIONEER PHYSICIANS AWARDED 50 YEAR PINS

In tribute to more than 50 years in the practice of medicine, five more members of the Oklahoma State Medical Association have been presented 50 Year Pins.

Frank W. Rogers, M.D., Carnegie, received a double 50 year award when Rotary International also presented him a 50 year pin at the same time of the O.S.M.A. presentation. The O.S.M.A. pin was presented by H. K. Speed, M.D., former president of the Oklahoma State Medical Association, and Drs. Cook, Waterbury, Smith and Sullivan assisted in the presentation.

Dr. Rogers, who was born at Wills Point, Van Zant county, Texas, April 8, 1874, was graduated in 1905 from the college of Physicians and Surgeons. Dr. Rogers' first practice in Oklahoma was at Old Violet Springs in Indian Territory. He came to Carnegie in 1909 and has resided there the past 40 years.

John Paul Jones, M.D., Dill City, and S. H. Hathaway, M.D., Mountain View, were presented their 50 Year Pins at a joint Kiowa-Washita County Medical Society meeting and the Fourteenth Councilor District meeting in Cordell.

Dr. Jones, 83-year old Dill City physician, has practiced medicine 54 years with 50 years of that time spent in Washita County. Born in Douglas, Nacogdoches County, Texas, March 24, 1866, he attended Vanderbilt Medical School in Nashville during the 1891-92 session and later medical college at Topeka and practiced in Texas until November 1898. Later he practiced at Port and Retrop before coming to Dill City.

Like many physicians who have been presented 50 Year Pins, Dr. Hathaway entered the medical department of the University of Arkansas and after one year was examined by the county medical board and granted a license to practice medicine and surgery. He practiced in Van Buren county, Arkansas, for one year and then moved to Hartshorne, Indian Territory where he spent two years. In 1897, Dr. Hathaway returned to the University of Arkansas for another year's training after which he located at Pontotoc, Indian Territory, where he practiced for nine years. During this time he returned to the University of Arkansas for two one-year terms, one in 1902 and one in 1905. He received his M.D. degree in 1905 and has taken several post-graduate courses in New York, Chicago and New Or-



Frank W. Rogers, M.D., Carnegie, receives his 50 Year Pin from former President of the O.S.M.A., H. K. Speed, M.D., Sayre.

leans since that time. Dr. Hathaway was born in Lauderdale county, Tennessee, in 1871.

Also presented pins at a county society — councilor district meeting were O. S. Somerville, M.D., and J. V. Athey, M.D., both of Bartlesville.

Born at Rockport, West Virginia, February 11, 1871, Dr. Somerville received his preliminary education at common school and Elizabeth Seminary in West Virginia and was graduated from Louisville Medical College in 1894. He practiced at Elizabeth, West Virginia, until 1904 when he came to Okla. Dr. Somerville moved to Bartlesville in 1906. From 1917 to 1946, when he retired, Dr. Somerville was medical director of the Phillips Petroleum company.

Leaving his practice in Ohio in 1908, Dr. Athey moved to the undeveloped state of Oklahoma and settled in Bartlesville. Always active in medical societies, Dr. Athey has served as president and secretary and councilor. Dr. Athey was born in 1872 and attended school in Cincinnati. He practiced medicine in Belpre until 1908 and served as a medical officer in World War I in 1917 to 1919.



John Paul Jones, M.D., Dill City, and S. H. Hathaway, M.D., Mountain View, receive congratulations from President George H. Garrison, M.D., following presentation of their 50 Year Pins.



O. S. Somerville, M.D., center left, and J. V. Athey, M.D., center right, both of Bartlesville, were awarded 50 Year Pins at the First Councilor District meeting. Other physicians in the picture are F. C. Etter, M.D., Bartlesville, H. C. Weber, M.D., Bartlesville, and George H. Garrison, M.D., Oklahoma City, and C. L. Johnson, M.D., Secretary of the Washington-Nowata County Medical Society.



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THAT MORE MAY KNOW



Progress is the word concerning the Oklahoma Medical Research Foundation, which now has the assurance that it will operate at the full scale of usefulness that was originally planned, and has every indication that the financial support needed will be provided for its continuing operation.

Research and Building Fund Campaign

The development program for the Research Foundation is progressing in a satisfactory manner. The primary objective of the campaign is to assure the financial status of the organization, so that it will be able to operate for a period of 10 years. Those planning the campaign decided to adopt a long range viewpoint, as an important incentive toward securing the best possible scientific staff for the institute. It was felt that with definite funds on hand, the best qualified research men would be acceptable to working in the Oklahoma Medical Research Foundation, where they would be free of the worry of funds sufficient to sustain their projects.

With Gov. Roy J. Turner as the general campaign chairman, and with Mr. W. K. Warren, president of the Warren Petroleum company of Tulsa as head of the steering committee, details of the campaign are completed, and it is planned to have the work finished by early spring. "We have the leadership, we have a worthwhile project, and we are confident that the future of the institute will be assured," Hugh Payne, general manager commented.

Cancer and Heart Research Hospital Grants

The most important development recently was an announcement that the United States Public Health Service, through the National Heart Institute and the National Cancer Institute, have granted \$225,000 to the Oklahoma Medical Research Foundation for the construction of a research hospital.

It will be a 22 bed hospital, designed and operated as an important part of a well-planned research institute. The grants are for construction and equipping of

the building only, and the federal agencies will have no control over the useage to be made of the building, it was pointed out.

"These grants will enable us to start the final phase of our operation much sooner than planned, since it had always been our thinking that the hospital would not be constructed until several years after the Foundation building," Payne explained.

The hospital will become the east wing of the Foundation building, extending north, and joined to the Foundation. Construction is scheduled to begin next spring, with completion scheduled early in 1951.

Awarding of the construction grants is an important reason why the development program to assure the Foundation of operating funds for a 10 year period was deemed necessary, since the Foundation will now have to assume the operation costs. There will be some income from the operation of the hospital, but not enough, particularly in the early stages of its use, it was explained.

The Heart Institute grant was for \$100,000, while \$125,000 was granted by the National Cancer Institute.

PLEDGE REPORT

Support of the Foundation by the physicians, other professional groups and the lay people of the state is continuing. Here is the statement of pledges as of November 21:

	No.		
	Pledges	Amount	Goal
Doctors of Medicine	664	\$ 565,655.00	\$1,000,000 (long range)
Dentists	227	144,991.75	255,000
Pharmacists	509	134,865.00	300,000
Medical Service Society		5,000.00	
Nurses	1,234	53,042.25	50,000
Technologists	59	5,670.43	
General Public	1,267	\$1,483,285.76	\$1,870,000
Totals	6,962	\$2,392,510.19	\$3,000,000

(Development Campaign Needs Are For An Additional \$2,500,000, the sum now being sought to operate the Foundation for a period of 10 years).

Typifying the pioneer country practitioner, Dr. and Mrs. H. A. Higgins, Ardmore, ride in a horse drawn buggy in a recent Ardmore parade. A replica of a stork on top of the buggy has a sign beneath reading "Hurry Doctor!"



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CERTIFICATE PRESENTED MYERS



David A. Myers, M.D., former colonel stationed at Fort Sill and president of the Oklahoma State Medical Association in 1910-11, was presented his past president's certificate in a California ceremony recently. The certificate was presented by John Hutton, Executive Secretary of the California Medical Society. Col. Myers now lives in Los Angeles.

PHYSICIANS HEAR SPEAKERS ON CANCER

During November two speakers on cancer, Stanley P. Reinmann, M.D., Director of the Research Institute at the Lankenau Hospital in Philadelphia, and R. A. Willis, M.D., pathologist in chief to the Royal Cancer Hospital of London, appeared in three state centers through the auspices of the Oklahoma Division of the American Cancer Society.

On Armistice Day, Dr. Reinmann appeared before the Southwestern Association for Research and addressed that group of 45 at a luncheon. In the afternoon he lectured to the junior and senior medical students at the medical school auditorium. That night he joined a hospital staff meeting at University Hospital, taking part in the discussion and speaking on "Experimental Chemotherapy in Malignancy."

Dr. Willis spoke to various groups during the week of November 20. He spent one morning with the Oklahoma Association of Pathologists in their monthly meetings and later spoke to a group on "The Recognition of Tumor Cells in Body Fluids and Secretions." "Diagnostic Errors Caused by Metastatic Tumors" was the topic he used when he spoke to the Tulsa County Medical Society, and he also discussed socialized medicine in England at the request of the Tulsa society. While in Tulsa he attended the tumor clinic at St. John's hospital.

Dr. Willis also was guest speaker at the Muskogee County Medical Society where he spoke on "The Recognition of Tumor Cells in Body Fluids and Secretions," and he discussed some of the cases and commented on slides at the Muskogee tumor clinic. He concluded his trip to Oklahoma with an address to all physicians attending the regular clinic at University Hospital on "Diagnostic Errors Caused by Metastatic Tumors."

Veterans needing emergency treatment are given priority in being admitted to Veterans Administration hospitals.

SPEAKERS AVAILABLE FOR COUNTY SOCIETIES

The Division of Postgraduate Instruction of The University of Oklahoma School of Medicine and the Oklahoma State Medical Association announce the following list of subjects which are available to County Medical Societies for the scientific portion of their meetings. This schedule will be effective during the first six months of 1950. These subjects will be presented by qualified members of the faculty of The University of Oklahoma School of Medicine, and one or more topics may be selected for any given meeting. Requests may also be made for subjects not listed but which might be of interest.

In order that necessary scheduling and arrangements may be made, requests for programs should be made at least three weeks in advance. Correspondence relative to the program should be directed to the Office of Postgraduate Instruction, 800 Northeast Thirteenth Street, Oklahoma City, Oklahoma.

SURGICAL SUBJECTS

Shock and Hemorrhage	Surgical Treatment of
Early Treatment of Burns	Peptic Ulcers
Non-Penetrating Abdominal Injuries	Gastric Ulcers
Management of Acute Cholecystitis	Differential Diagnosis of Appendicitis
The Perforated Appendix	Surgical Approaches to Abdominal Organs
Postoperative Care	Inguinal Hernias
Intestinal Obstruction	Carcinoma of Face and Mouth
Swellings in the Neck	Thyroid Malignancy
Lung Abscesses	Breast Tumors
Carcinoma of Breast	Leg Ulcers
Pediatric Surgery	Splenectomy Indications and Precautions
Bladder Neck Obstruction	Upper Gastro-Intestinal Bleeding
Lesions of Testicle and Spermatie Cord	Carcinoma of Rectum and Sigmoid
Indications for Lumbar Sympathectomy	Fracture of Hand and Wrist
Benign Lesions of Anus and Rectum	Common Disorders of Foot
Infections of Hand	
Chest Injuries	
Head Injuries	

MEDICAL SUBJECTS

Arthritis — Recent Advances	
Cardio-Vascular	
Use of Anti-Coagulants in Infarctions	
Congenital Heart Disease	
Gastro-Intestinal	
Hepatitis	Peptic Ulcer
Hematology	Liver Function Tests
Pernicious Anemia	Leukemias
Dermatology	
Precancerous Lesions	
Illustrated Lectures on Skin Problems	
Chest	
Pneumonias	Fungus Diseases of Chest
Tuberculosis	
Endocrine Subjects	
Diabetes	Thyrototoxicosis
Male and Female Hormone Problems	
Review of Autonomic Blocking Agents	
Review of Current Antibiotics	
Review of Anti-Histamine Drugs	
Exact title of material to be covered will vary as programs on the same general subject are presented by different faculty members on various occasions.	

Twenty-eight hospitals are scheduled for completion in 1950 by the Veterans Administration.

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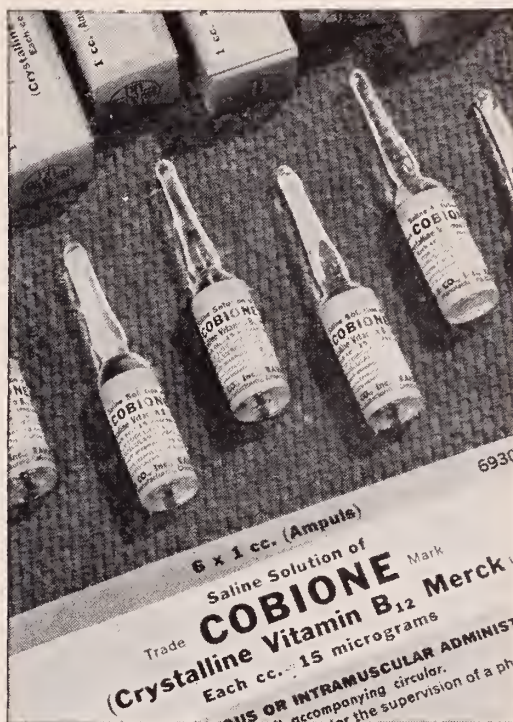
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OBITUARIES

CHARLES D. BLACHLY, M.D. 1878-1949

Charles D. Blachly, M.D., who practiced medicine in Oklahoma City 25 years, died November 7 in Oklahoma City.

Dr. Blachly was born at Manhattan, Kansas, and received his B.S. degree from Kansas State Agricultural College in 1902. He was graduated from the University of Kansas School of Medicine in 1907. Before coming to Oklahoma City, Dr. Blachly also practiced in Hewins, Kansas; and Norman, Drumright and Cushing, Oklahoma.

JOHN C. DOVELL, M.D. 1872-1949

John C. Dovell, M.D., Paden, a practicing physician

for 54 years, died November 5, 1949.

Born at Brice, Franklin County, Ohio, Dr. Dovell attended Newton, Illinois, highschool and Austin College, Effingham, Ill.; and O. W. U., Delaware, Ohio. He was graduated from Barnes Medical College, St. Louis, in 1902. Dr. Dovell had practiced in Shawnee, Prague, Guthrie and Oklahoma City.

In 1926 he went to Wamba Nambia, Belgian Congo, as a Methodist medical missionary. During his stay there, he contracted malaria. He served in Africa three years.

He was a member of the Ancient and accepted Scottish Rite of Oklahoma, Valley of Guthrie and civic and medical organizations.

BOOK REVIEWS

ATLAS OF OBSTETRICS, Paul Titus, M.D. St. Louis.
C. V. Mosby Company, 1949. Price \$7.50.

This book undertakes to present in pictorial form the subject of modern obstetric technic. The detailed steps in obstetric procedures are shown by means of numerous illustrations. This atlas is an excellent supplement to the usual textbooks on obstetrics.

The atlas is divided into 17 sections, each dealing with a particular subject and for the most part some phase of operative obstetrics. A blank page after each section is available for the reader's notes. Dr. Titus has added to this second edition a brief new section on antipartal care, and also another on analgesia and anesthesia. There is a discussion of the normal delivery as well as liberal illustrations of techniques for the abnormal deliveries.

This book is a valuable source of information for the general practitioner and for the resident in training and as a refresher for the obstetrician.

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—Wm. F. Thomas Jr., M.D.



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Harry C. Ford, M.D., formerly of Oklahoma City, is now associated with the Miami, Oklahoma, clinic.

F. M. Adams, M.D. and *S. A. Lang, M.D.*, Nowata, were recently honored at a dinner at the Nowata Hospital. Dr. Adams is retiring chief of the medical staff and Dr. Lang is the incoming hospital head.

Dwney Mathews, M.D., Tonkawa, was one of three vice-presidents elected for district eight of the University of Oklahoma Dads' association.

C. Riley Strong, M.D., El Reno, was a member of the Chamber of Commerce election committee.

O. E. Templin, M.D., Alva, was chairman in charge of the duck dinner held in connection with the crippled children's clinic, under the auspices of the Oklahoma Society and Commission for Crippled Children, the Alva Rotary Club and the State Division of Vocational Rehabilitation.

Paul Champlin, M.D., Enid, spoke on Recent Developments in the Field of Cancer Research at the noon luncheon initiating the cancer home service program in Enid. *B. J. Cordonnier*, and *Charles Roberts, M.D.* also addressed the group.

Glen W. McDonald, M.D., Pawhuska, said the "proposed compulsory health insurance bill being considered by the present administration promises an undetermined service for an unpredictable amount of your income" when he spoke to the Pawhuska Rotary club recently.

V. Berry, M.D., Okmulgee, recently wrote a one page feature article for the *Holdenville News* tracing the history of Wetumka, where he formerly practiced.

A. B. Holsted, M.D., Temple, recently has completed some new decorating in his clinic and hospital.

Francis M. Duffy, M.D., attended an Armistice Day luncheon in Washington held under the auspices of the National Conference of Christians and Jews.

J. H. Plunkett, M.D., Wagoner, spoke against socialized medicine at a luncheon of the Wagoner Lions Club.

Richard Ellis, M.D., Duncan, made high score and was presented with a master award at a registered tournament of the Duncan casting club.

C. W. Letcher, M.D., Miami, was named temporary chairman of the Ottawa County Camera Club.

O. L. Parsons, M.D., Lawton, recently had a series of articles published in the *Lawton Constitution* giving the story of Lawton football since 1902. The articles followed a years' research on the football history.

Woodroe Williams, M.D., Idabel, has returned to that city after making a world tour for several weeks.

Mark D. Holcomb, M.D., Enid, spoke on Some Aspects of Atomic Energy when he addressed the Enid branch of the American Association of University Women.

Walter Hardy, M.D., Ardmore, has been elected to honorary membership in the American Association of Industrial Physicians and Surgeons.

N. H. Cooper, M.D., Ponca City, has been certified by the American Board of Preventive Medicine and Public Health.

O. C. Newman's, M.D., Shattuck, portrait was unveiled and presented to the Oklahoma Hall of Fame in special ceremonies on Statehood Day, November 16. Dr. Newman was elected to the Hall of Fame in 1943.

David Gillick, M.D., Talihini, attended the Inter-Agency Institute for Hospital Managers in Washington, D. C.

A. C. Hirshfield, M.D., Oklahoma City, was guest speaker at a meeting of the Duncan Fish and Game Club.

W. F. Lewis, M.D., Lawton, was guest speaker at the regular weekly luncheon meeting of the Army Wives' club of Lawton.

John F. Hackler, M.D., Muskogee, spoke on Cancer Control Activities at the luncheon meeting of Oklahoma District No. 7 and 8 of the American Cancer Society in Tulsa.

Wylie Chestnut, M.D., Miami, attended the International College of Surgeons meeting in Atlantic City and the Southern Medical Association in Cincinnati. He was accompanied by Mrs. Chestnut.

A. Ray Wiley, M.D., Tulsa, who spent last summer touring western Europe and England, reported to the fifth district convention of Federated Women's clubs, meeting in Shawnee, on socialism and stated that "this country is moving dangerously to the left and towards financial ruin and loss of individual liberty".



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MEET OUR CONTRIBUTORS

Thurman Shuller, M.D., McAlester, wrote "Hay Fever in Infants" in the January Journal. Dr. Shuller is a graduate of the University of Arkansas School of Medicine 1939 and limits his practice to his specialty, pediatrics. He has been certified by the American Board of Pediatrics and served a residency in pediatrics at Charity Hospital, New Orleans, before coming to McAlester.

H. Violet Sturgeon, M.D., A.B., B.S., Hennessey, a University of Oklahoma School of Medicine 1933 graduate, is the author of "Pediatrics in General Practice" in this issue. Dr. Sturgeon, who is in general practice, is active in the American Academy of General Practice, and is president of the Kingfisher County Medical Society, and vice-president of the Oklahoma State Medical Association.

L. S. Frank, M.D., B.S., Oklahoma City, has an article on "Early Diagnosis and Treatment of Meningitis in Infants" in this Journal. Dr. Frank, who is clinical instructor, Oklahoma University School of Medicine, limits his practice to pediatrics. He has been certified by the American Board of Pediatrics and is a member of the American Academy of Pediatrics, and Oklahoma City Pediatric Society. He practiced in Chicago before coming to Oklahoma City. He was graduated from Northwestern University in 1937.

Gerald Rogers, M.D., F.A.C.S., Oklahoma City, whose article, "I've Felt This Way Since Mary Was Born," appears in this issue, was graduated from the University of Oklahoma in 1930. Certified by the American Board of Obstetrics and Gynecology, he limits his practice to obstetrics and gynecology. Dr. Rogers is associate professor of gynecology, University of Oklahoma School of Medicine, and is a member of the American College of Surgeons and Central Association of Obstetricians and Gynecologists.

Myron Ezra Wegman, M.D., New Orleans, annual meeting guest speaker whose article appears in this issue, is professor of public health, Louisiana State University School of Medicine, New Orleans, diplomate of the American Board of Pediatrics and formerly a member of the faculty of Johns Hopkins School of Medicine, Yale University School of Medicine and Cornell University School of Medicine. He is a member of the American Academy of Pediatrics and the American Public Health Association.

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ANNOUNCEMENTS

OKLAHOMA STATE MEDICAL ASSOCIATION ANNUAL MEETING, May 14, 15, 16, 17, Oklahoma City.

COOK COUNTY GRADUATE SCHOOL OF MEDICINE. Announcement is made of the addition to the staff of John W. Neal, who will serve as comptroller and assistant registrar. Mr. Neal is the son of the late John R. Neal, M.D., who was Dean of the Cook County Graduate School of Medicine at the time of his death.

COURSES IN CYTOLOGIC DIAGNOSIS OF CANCER. These courses will be available in the near future at the University of Colorado School of Medicine for pathologists and qualified physicians. Two types of courses will be offered, one will meet one afternoon each week for 12 weeks; the other will meet daily for a period of two weeks. Two types of courses are now being offered for technicians by ap-

pointment. One is a two weeks course in staining techniques only; the other is a four months course in the techniques of staining and screening. Physicians or technicians interested in enrolling in any of the above courses should write to Walter T. Wickle, M.D., Director of Laboratory of Exfoliative Cytology, University of Colorado School of Medicine, 4200 East 9th Ave., Denver 7, Colo.

CHICAGO MEDICAL SOCIETY CENTENNIAL. Annual clinical conference Feb. 28-March 1, 2, 3. Clinical sessions, scientific lectures, scientific and technical exhibits, color television of actual surgical procedures and black and white telecasts and entertainment will feature the meeting, which will have the Palmer House as headquarters.

INTERNATIONAL AND FOURTH AMERICAN CONGRESS ON OBSTETRICS AND GYNECOLOGY. May 14-19, 1950, Hotel Statler, New York.

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Dr. Conrad G. Collins, Professor of Obstetrics and Gynecology,
Tulane University, January 9, 10, 11, 1950.

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19th Annual Spring Conference — March 13, 14, 15, 16, 1950

MEDICAL SOCIETIES AROUND THE STATE

Tulsa County

Two November meetings concluded the 1949 schedule of scientific programs for the Tulsa County Medical Society. R. Willis, M.D., Pathologist to the Royal Cancer Hospital, London, England, spoke November 21 on "The Challenge of Cancer". November 28 Edward L. Moore, M.D., Tulsa, discussed "The Use of Surgery for Peptic Ulcers".

Oklahoma County

The Oklahoma County Medical Society buffet supper was held at the Oklahoma Club November 22. Speakers were Lewis J. Moorman, M.D., and Basil Hayes, M.D.

Kiowa-Washita

Two pioneer physicians of western Oklahoma, J. Paul Jones, M.D., Dill City, and S. H. Hathaway, Mountain View, were honored at a joint meeting of the Kiowa-Washita medical Society and the fourteenth councilor district held in Cordell. Presentation was made by George H. Garrison, M.D., Oklahoma City, President of the Oklahoma State Medical Association. A complete report of the meeting appears elsewhere in the Journal with biographical data about Drs. Jones and Hathaway.

Carter County

The Carter County Medical Society held a ladies' night program early in December. At the November meeting, a lecture on Management of Chest Injuries by the General Practitioner was given by Robert Shaw, M.D., Dallas, and a color film on erythroblastosis fealis was shown.

Choctaw-McCurtain-Pushmataha

A joint meeting of the tri-county medical society and the tri-county pharmaceutical association met at Broken Bow recently. Two physicians from DeQueen, Arkansas, Drs. Kimball and Callahan, spoke to the group on general medicine.

Garfield County

Medical and military aspects of atomic explosion were explained by Mark D. Holcomb, M.D. and George T. Ross, M.D. at the November 22 meeting of the Garfield County Medical Society. The two physicians recently attended a course of instruction at the Army Medical Department Research and Graduate School, Medical Center at Washington, D. C.

Washington-Nowata

The first councilor district meeting and the Washington-Nowata County Medical Society had a joint session in Bartlesville in November. Physicians and their wives from each county in the district attended with approximately 70 present. A golf tournament was held in the afternoon with a tour of Woolaroc for the ladies. Out of town visitors included Dr. and Mrs. George H. Garrison, Oklahoma City; Mrs. Clinton Gallaher, Women's Auxiliary President, Shawnee; James Stevenson, M.D., Tulsa; Ralph A. McGill, M.D., Tulsa; Mrs. Neil W. Woodward, Oklahoma City; Dick Graham, Oklahoma City; and Sol Wilner, M.D., Tulsa, who presented the scientific paper.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE COUNCIL MEETING

On December 18 while the great majority of the members of the State Medical Association were prescribing pills or pursuing pleasure, the members of the Council were struggling with the Association's routine business including some very grave problems. The latter coming out of crazy situations which have resulted from the socio-economic quirks of a welfare state psychology which has a cockeyed world rocking dangerously on the shoulders of a distraught atlas.

The deliberate analytical approach to all problems, the sincerity, patience, poise, tolerance and judgment employed by all members command the respect and gratitude of every member of the State Association.

Such deliberations not only assure wise administration of the State Association but they put our Association in line for national recognition. Already the splendid reports of our delegates to the A.M.A. reflect our influence in national affairs.

Our hats are off to the officers of the Oklahoma State Medical Association and its faithful workers including all members of the staff at 210 Plaza Court.

While our Councilors and workers may not be world famous "Ancients of the College", they dispense

"... God's own Common Sense which is more than knowledge".

A NEW FRONT AS WE GO OUT THE BACK DOOR

It is unfortunate that physicians who in times past had the love and support of all the people must now employ non professional experts in public relations. Always physicians have known how to handle the sick. But now with more well people than ever before they must learn how to gain the respect and support of the well.

Physicians must change their method of approach. It doesn't require a psychologist to see what is going on. Without the obvious tactics of a labor union, physicians

must learn how to present a united front against the organized politically minded groups who would destroy liberty and free enterprise. Each member of the State Medical Association should decide how he can best serve the cause and he should stand ready to help preserve our way of life at the cost even of time and money. Physicians must cultivate the public, they must become educators, unobtrusively they must inform the people as to the value of medical service now available and the danger of government control.

The State Association should establish a speakers' bureau and a training school for prospective speakers where knowledge and methods necessary to cope with current problems may be acquired.

Any physician who refuses to do what he can in the execution of such plans will consciously or unconsciously become a traitor to his people and his profession.

The present threat of radical changes in medical care is serious. Even the sick can afford to wait while their physicians lead the fight in their behalf.

WHEN SIR STAFFORD SPILLED THE BEANS

Socialist government promoters in Great Britain had spread their propaganda, preened their wings and crowed over their rosy progress through oppression of capital until Sir Stafford Cripps on April 6, 1949, appeared before Parliament, blew his harsh budget whistle and flashed the red light on the merry marathon of government spending for social security including subsidies and socialized medicine. The latter being the straw that broke the camel's back. Suddenly socialists realized they were being damned by their vaunted redeemers. Cripps called the game and made it clear that by robbing Peter to pay Paul, they had come smack against the proverbial stone wall.

By June, 1949, Britain's bullion had bumped far below the acknowledged mar-

gin of safety. This came about because the socialist high cost of production could not compete in the world's markets. Wages were too high and working time too low to make the old mare go. They were learning that those who grind down the peaks of social economy must bite the dust.

Already New Zealand and Australia have found this out and are trying to retrieve their integrity. Today the people of Great Britain are on fish and potatoes except when the capitalistic dollars from America give them a bit of protein. Perhaps Britain's precipitate ruin will prove to be our good fortune. Only after 10 or 12 years of socialized medicine did New Zealand crack up. This was unfortunate for the Washington bureaucrats because our own New Deal was bolstered by stuffed reports of New Zealand's socialistic success. Now that New Zealand and Australia are beating back while Britain is going under, we may see the light in time to intercept the New-Fair-Deal planning and halt the sinister, socialistic infiltration of our democracy before this evil design culminates in a communistic crisis. Free enterprise in all fields, including medicine, should join hands across party lines for the preservation of our one freedom inherent in common liberty.

DR. FISHBEIN RESIGNS

After a long and successful career as Editor of the A.M.A. Journal, Dr. Morris Fishbein has resigned.

According to press notices, he will be associated with Doubleday and Company and with Blakiston Company, Philadelphia. It is gratifying to know that he is to be associated with these great publishers where his editorial and literary skills may continue to find expression.

Since the above lines were written, Dr. Charles W. Mayo, Editor-in-Chief of *Post-graduate Medicine*, has announced that Dr. Fishbein has been appointed as contributing editor of this publication.

COURTESY TRAVEL SERVICE IN THE WEST

Apparently under the Associated Medical Care Plans, "California Physicians Service" (Blue Cross and Blue Shield), offers a courtesy service to traveling policy holders who are visiting this already overcrowded area. This is characteristic of western ingenuity and cordiality. The courtesy service includes

advice to tourists, with information as to where and how to go, hotel reservations, available sports, etc. It is said that the service even includes stenographic service.

We take off our hats to California.

NOT WITHOUT HONOR EXCEPT IN HIS OWN COUNTRY

According to an AP release Dec. 15, U.S. Federal Security Administrator Oscar R. Ewing in Edinburgh "received a pat on the back from Scottish doctors".

A long way to go for a pat from people so remotely removed from America's medical problems. But traveling on the taxpayers' money can be easy and deliberate. Mr. Ewing and his group of subordinates might have acquired more information at less expense if they had remained in Washington and mailed a questionnaire to 150 thousand American physicians and an equal number of their patients.

American physicians should know what the people need and the American people should know what they want. If an honest attempt to gather the facts at the local level results in a pat on the back all well and good; if it brings a swift kick in the pants, then all the better.

LIFE

A man's real life is not in the printed book but timidly and sometimes skillfully concealed between the lines. In truth most of it lingers where man really lives and loves and laughs and sulks and sins and prays and repents and starts all over again, avowing this is where life begins, only to meet the same old sins that Socrates mapped and sought to sock before he succumbed to the deadly hemlock.

But above all, physicians should persevere knowing that out of this ever recurring cycle which engulfs humanity the great exponent of reason who accepted the hemlock rather than acquiescence in the false charges of the Periclean lords employed his last words to pay a compliment to medicine. "Creto we owe a cock to Aesculapius, will you see that it is paid".

Socrates died like a scientist in the cause of truth. Even after the lapse of two thousand and five hundred years we cannot afford to disappoint him. We must be brave and bold and tighten our hold on truth until our course is run.

THE BOOMERANG

It appears that physicians are making it possible for the bureaucrats to perpetuate themselves in office while the people are being swept into the welfare state. Long ago a Washington official said the government has two serious problems, the youth group and the old age group. In a political speech he had strongly advocated better medical care for the American people. He was wholly unaware that already medicine had been good enough to create these two problems. By saving life in infancy and fostering health in adolescence, medicine had brought the government face to face with the problem of a vigorous youth group clamoring for opportunity. By better care of the aged and the prolongation of life, medicine had produced an old age group in need of medical care and physical comfort.

Instead of squarely placing the responsibility of these problems where it belongs, the government gladly assumed the care of both. The youth of the land must not be troubled with the responsibility of paying for his education or finding his own way into a gainful occupation. The aged must have a pension whether they need it or not. Let Uncle Sam care for them. Are not the aged still young enough to vote. Will not the youth soon march to the polls. The old practice of secretly slipping a dollar bill to the susceptible voter at the time of election has been outmoded by the more refined method of providing a subsidy.

For the bureaucrats, it is a short way back to Bismarck whose policy was to place the people under obligation and perpetuate the tenure of office.

Already over the heads of those who pay the bills the young and the old vote to perpetuate the New-Fair-Deal, thus destroying all hope of an overall square deal. If this continues, socialized medicine is inevitable.

Are physicians too good for their own good and are their skills robbing the people of freedom?

TOO MANY BYRDS

It is reported that the President has said, "There are too many Byrds in Congress."

Though entirely of another feather, there are at least two, too many *birds* in the executive branch of the government.

To all physicians they are known by the song they sing. Consequently, it is unnecessary to call names.

PHYSICIANS NOT INTOLERANT

In these trying times when physicians must stand on principle and defend the cause of medicine against usurpation by designing bureaucrats there is danger of misunderstanding on the part of those not informed as to medicine's traditions and the physician's avowed Hippocratic purpose of placing the patient's interests above his own. Always he should make it clear that his opposition to government medicine is a fight for the freedom of the people and the profession and not merely a selfish move in defense of his own interests.

TIME TO BE BRAVE

It has become necessary to protect our land from a new kind of kings.

Left wing Aneurin Bevan, British Minister of Health, kicks the one-time great free people and their helpless physicians around with less consideration than a Kentucky mountaineer accords his second rate coon dog, utterly disregarding the honeyed promises with which he tolled them into his political fold. On a smaller scale, in a freer land, the obsessive compulsive John L. Lewis orders nearly a half million otherwise free miners off and on the job as though they were robots controlled by a push button instead of a burley beetle-browed bulldozer. This situation shows that it can happen here. Already there is much mass serfdom in America.

While Truman and Ewing are stewing for control of medicine, a hundred and fifty million people including the members of the medical profession are still free to think, speak and act in defense of their God given liberties vouchsafed by the Founding Fathers of our democracy. For the sake of our own freedom and the benefit of posterity it is our everlasting duty to be brave in defense of these liberties.

The complete federal control of medicine would serve as a consummate stroke for the adroit but militant advocates of the totalitarian rule achieved through the insidious appeals of the welfare state which always burglarizes the people's freedom and leaves them in degradation utterly devoid of self respect.

True to their Hippocratic vows which puts the patient's interests first, medicine in America must never serve as the entering wedge which squanders free government and enslaves its proud citizenry. Let us make sure that this threatened menace of bureaucracy always finds us unafraid.

SCIENTIFIC ARTICLES

CANCER OF THE STOMACH: CLINICAL PROBLEMS INFLUENCING PROGNOSIS*

J. EDWARD BERK, M.D., Sc.D.

PHILADELPHIA, PA.

Of all the organs of digestion, the stomach is most vulnerable to the development of cancer. The magnitude of the problem is perhaps better appreciated when it is realized that gastric cancer was responsible for over one-third of the 73,000 deaths from malignant tumors of the digestive tract and peritoneum in 1940 in the United States¹. This represented approximately 21 per cent of the total cancer deaths among men and 12 per cent among women. It has been estimated that by 1960, at the established rate of increase in age of the population, 40,000 people may be expected to die annually in the United States of gastric carcinoma². Stating it more dramatically, Livingston and Pack³ pointed out that over a period equal in time to the 15 years that the United States had been engaged in wars up to and including World War I, more of our people died from cancer of the stomach than died as a direct result of the wars.

But the problem is not alone one of frequency. The outlook for those who develop the disease has been extremely pessimistic. In an extensive survey of the world literature from 1881, when Billroth first successfully resected the stomach for cancer, to 1938, Livingston and Pack found that the average resectability rate was only 19 per cent of all patients observed and the average resection mortality was 25 per cent. At the Mayo Clinic up to 1938⁴, and at the Graduate Hospital of the University of Pennsylvania up to 1945, exploration was considered worth-while in only a little better than half of the patients when seen and in only one-fourth could resection be carried out. Furthermore, Livingston and Pack found from their survey that the average five year cure rate up to 1938, based on reports of patients traced, was but two per

cent. Similarly, only six per cent of the patients with gastric carcinoma seen at the Mayo Clinic from 1907 to 1938 were alive five years following diagnosis⁴. In 1945 I reviewed 239 cases of gastric cancer recorded at the Graduate Hospital of the University of Pennsylvania between the years 1930 and 1945. Although insufficient time had elapsed to evaluate the five year status in all cases, it is notable that only two patients were found still living five years or more after the diagnosis had been made.

This dismal recital is fairly representative of the experience throughout the country with this disease. It is small wonder, therefore, that the diagnosis of gastric cancer has been attended with a spirit of hopelessness on the part of both patient and physician. Within recent years, however, the picture has assumed some encouraging aspects. For the decade 1936 to 1946, the operability rate at institutions where the surgical attack on gastric cancer has been relentless, has risen to about 75 per cent with an average resectability rate in excess of 40 per cent of all patients observed^{5, 7}. One of the most encouraging reports is that from the University of Minnesota for the year 1945. Of 77 patients with gastric cancer seen at this institution during that year, 88 per cent were explored and 80 per cent underwent resection⁵. And this remarkable accomplishment was achieved with a post-operative mortality of only 4.9 per cent. Equally encouraging is the operative experience at the Mayo Clinic during 1947⁶. The gastric surgeons at this institution describing their experience in 1947, reported a hospital death rate in 148 patients who underwent partial or total gastrectomy for malignant gastric lesions (54 per cent of the total number of patients operated on) of only six per cent.

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association May 17, 1949.

It is a remarkable tribute to surgical practice that while operations for removal of malignant tumors of the stomach have become progressively less hazardous, the surgical procedures themselves have grown steadily more radical. If the answer to the gastric cancer problem depended solely on improvement in surgical treatment, it would seem that we are well on our way to a satisfactory solution. Unfortunately, however, this is not the case. The great obstacle still to be overcome is late diagnosis. Even those cases deemed worthy of exploration continue in most instances to show metastases to regional lymph nodes or extension to other organs. Gastric resection performed under such circumstances, however successful in prolonging life and reducing discomfort, is still essentially palliative and not curative. Thus, the *per cent* of five year cures among patients surviving gastric resection for cancer has not been remarkably elevated even though the *total number* of patients surviving five years or more is greater because of the greater number operated on and resected. Taking every available report up to 1938, complete or incomplete, an average of 19 per cent of all patients discharged after gastrectomy for cancer were living at the end of five years; taking only those reports in which the follow-up study was thorough, an average of 27 per cent were alive after five years³. In comparison, the five year survival rate among resection survivors operated on between 1936 and 1942 was but 21.5 per cent at the University of Minnesota⁵ and 35 per cent at the Memorial Hospital in New York⁶.

These considerations make it clear that the great goals in gastric cancer are early detection and wider application of curative surgical resection. The remainder of my remarks, therefore, will be confined to some of the problems involved in achieving these aims.

CLINICAL FEATURES

Cancer of the stomach is primarily a disease of middle and late life with most cases being seen clinically in patients 50 to 60 years of age⁸. The disease, however, is not confined to the older age groups and must be given consideration in younger people too. In 1940 in the United States the percentage of deaths from cancer of the stomach in patients under 30 years of age was 0.6; in patients 30 to 44 years old it was 4.7¹. Clinical reports suggest still a higher rate of occurrence in persons in the first three decades of life, the incidence

ranging from one to three per cent of the total number of cases⁸.

Unfortunately, there is no symptom complex by which gastric cancer may be identified in its earliest stages. The *first symptoms* are treacherous and beguiling because they are commonly vague, non-descript, and minimal. Judging from surgical cases known to have carcinoma in the proximal line of resection following partial gastric resection, there is an asymptomatic interval of approximately 15 months; following this, vague symptoms ensue for another four to six months⁵. The initial symptoms may consist merely of slight epigastric discomfort relieved by a bland diet. Loss of the usual feeling of satisfaction following an enjoyable meal may be the first indication that all is not well. Fullness after heavy meals followed soon by loss of appetite, mild epigastric discomfort, some nausea, early satiety, and perhaps regurgitation of small amounts of food, may be the earliest evidences of pyloric obstruction. Vague substernal oppression and some slight difficulty in swallowing solid foods may be the sole manifestations of a developing lesion in the upper stomach and lower esophagus. Approximately one-third of the patients present an ulcer-like syndrome and, importantly, approximately 80 per cent of the patients with such a symptom complex feel better on an ulcer regimen. Occasionally, the presenting symptoms are progressive loss of weight and strength, anemia, or massive gastro-intestinal hemorrhage. Sometimes the first clinical manifestations are due to metastasis, such as ascites, jaundice or respiratory distress.

The vagueness of many of these first symptoms is probably largely responsible for the average delay of about six months from appearance of symptoms to consultation with a physician, and the average delay of somewhat less than one year from onset of symptoms to establishment of diagnosis. No more telling commentary can be made on the difficulty identifying gastric cancer in its early stages than to point out that among the victims of the disease who recognized its signs in themselves too late to be cured, were such authorities on gastric cancer as von Mikulicz, W. J. Mayo, D. P. D. Willkie, Martin Kirschner and R. D. Carman⁹.

Physical findings vary with the duration of the disease and character of the lesion. Evidence of metastasis should be carefully sought for. Search should particularly be

made for enlarged left supraclavicular lymph nodes, enlargement and nodularity of the liver, and Blumer's Shelf, a shelf-like projection of the anterior rectal wall above the prostate in the male and behind the uterus in the female, due to metastatic tumor in the cul-de-sac. These signs may occasionally be detected before symptoms become notable.

LABORATORY FEATURES

Occult blood is not only commonly present in the stools, but it characteristically persists. In the early stages, the blood picture shows no striking abnormality save for slight anemia. The erythrocyte sedimentation rate is often increased. About three-fourths of all patients show either achlorhydria or marked hypochlorhydria by fractional Ewald meal gastric analysis. This should not blind us to the important fact, however, that an appreciable number of patients have normal or even hypernormal concentrations of hydrochloric acid. Gastric analysis may also point to the presence of an ulcerating lesion in the stomach by disclosing persistently elevated occult blood reactions and sometimes even gross blood in the gastric contents.

Cytologic examinations of gastric contents is a promising addition to the study of gastric secretions. Experience with the smear method of identifying malignant cells in gastric aspirates is still limited, however, and technical problems remain to be solved. In the small number of cases studied to date, the percentage of unequivocally positive findings range from approximately one-third^{10 11} to two-thirds¹² of the cases with malignancy of the stomach. A disturbing problem in diagnosis by this method is the scirrhous type of malignant tumor which produces little or no change in the mucosal surface. Still another problem is false positive interpretations in cases without gastric cancer. In some hands, positive cytologic smears have been reported in as high as 19 per cent of patients free of histologic evidence of carcinoma of the stomach¹¹.

GASTROSCOPY

This method of study is complementary to x-ray. It may be especially helpful in carcinoma of the stomach when roentgenologic examination is inconclusive or negative. Perhaps its greatest field of usefulness is in helping to differentiate ulcerating carcinoma from benign gastric ulcer. However, gastroscopy has decided limitations. Many of these are being overcome as newer instruments are invented which permit visual-

ization of areas formerly incapable of being seen. The new flexible operating gastroscope which permits a biopsy to be taken should prove particularly helpful in cases of gastric cancer. When gastroscopy can be successfully carried out, and especially when the examination is repeated in uncertain cases, diagnosis may be made by this means in about 85 per cent of the cases¹³.

X-RAY FINDINGS

The greatest defect in roentgenologic study of the stomach for carcinoma is incomplete examination. If all maneuvers are employed and examination repeated in doubtful cases, a recognition accuracy of at least 90 per cent may be expected¹³. Approximately 10 per cent of gastric ulcers considered benign by x-ray, subsequently prove to be carcinomatous. Large rugal folds or giant rugae simulating carcinoma present one of the most troublesome problems in differential diagnosis. Constricting lesions of the distal stomach likewise afford much difficulty in diagnosis, but these lesions should all be considered malignant until proved otherwise.

Consideration has been given in recent years to mass fluoroscopic survey of patients over the age of 45 as a means of uncovering early cases of gastric cancer. The yield of positive findings in the studies performed to date has apparently been too small to justify the assumption of so enormous a task. However, mass roentgenologic surveys at regular intervals may prove fruitful in: (a) patients with pernicious anemia, in whom the incidence of gastric carcinoma is about three times as great as in the population at large of the same age group¹⁴; (b) patients with histamine-fast achlorhydria, particularly those who also have gastroscopic evidence of atrophy of the gastric mucosa; (c) patients found to have benign-appearing polypoid tumors of the stomach; and (d) asymptomatic relatives of patients with proved gastric cancer^{5 9 15}.

DIAGNOSTIC CONSIDERATIONS

No patient suspected of carcinoma should be discharged because the initial series of studies were negative. It is important that such people be followed with repeated examinations at regular intervals over a period of months before it is concluded that carcinoma does not exist. My colleagues and I have had the experience on more than one occasion of having to repeat roentgenologic and gastroscopic examinations for several months before the gastric cancer we had initially suspected became evident.

Perhaps the problem of early recognition may eventually be solved with the development of some reliable immunological test. While much experimentation has been carried out in this field, no test has thus far appeared which has proved over a period of time to be highly reliable.

DIFFERENTIATION OF BENIGN AND MALIGNANT ULCERS

Inability clinically to differentiate benign and malignant ulcers of the stomach in all cases has prompted several prominent surgeons to advocate routine gastric resection for gastric ulcer. While the proponents of this attitude point to the extremely low mortality rate now obtaining in their hands for gastric resection for benign gastric ulcer, it does not follow that the same mortality rate will hold for *all* surgeons and *all* institutions throughout the United States. Furthermore, errors in diagnosis by clinicians well trained in the diagnosis of diseases of the digestive tract and well aware of the nature of the problem, are few indeed. At the Lahey Clinic, for example, the incidence of malignancy in cases of gastric ulcer diagnosed as benign and treated medically, appears to be significantly less than the mortality at that institution for gastric resection for benign ulcer of the stomach¹⁵.

My own inclination is against gastric resection of all gastric ulcers. I prefer to attempt to establish the benignancy or malignancy of the ulcer in each case individually. In my opinion, diagnosis based on due consideration of the clinical, laboratory, and x-ray features and treatment directed accordingly, is preferable to routine resection. Under this plan the therapeutic approach is very much as follows:

If the patient is of advanced age, if the symptoms are of short duration and lack the classical rhythm of ulcer, if there is evidence of constitutional deterioration, if a mass can be palpated in the epigastrium, if there is anacidity, if stools are persistently positive for occult blood, if gastroscopy shows a thickened edge of the ulcer with nodularity of the adjacent mucosa, if the lesion is in the distal portion of the stomach or on the greater curvature, if the lesion roentgenologically presents a filling defect and destruction of the mucosal pattern, if the contour of the niche is irregular, and if the duodenal cap is normal, a diagnosis of malignant ulcer is entirely justified and surgical intervention warranted after appropriate preparation.

On the other hand, if the patient is be-

low middle age, if the symptoms are of long duration and characteristically periodic and rhythmic, if physical findings are essentially negative, if gastric acidity is normal or increased, if gastroscopy shows the edge of the ulcer to be sharp and smooth and without adjacent nodularity, if the ulcer is situated on the lesser curvature and constitutes an addition defect to the normal outline of the stomach, if radiating mucosal folds project into the niche, if there is an associated spastic incisura, and if the duodenal cap is deformed, a diagnosis of benign ulcer would seem justified.

In the latter event, as well as in cases where the evidence is not clear-cut one way or the other, a rigid and closely supervised medical regimen is instituted. At the end of two or three weeks, the situation is again surveyed. The following are demanded to confirm the impression of benignancy and justify continuation of medical treatment: (1) disappearance of all subjective complaints; (2) disappearance of occult blood from the stools; (3) gain in weight; (4) disappearance or marked decrease in size of the ulcer as shown on comparable roentgenograms. Failure to meet these criteria arouses suspicion of malignancy in spite of the previous findings and gastric resection is carried out.

Patients with ulcerating gastric carcinomas very often improve subjectively on medical management. In occasional cases, the ulceration may even appear to heal roentgenologically. I should like to emphasize, however, that it is most unusual for gastric carcinoma to meet *all* the criteria of improvement outlined above after two or three weeks of medical treatment. Moreover, there would appear little danger in delaying two or three weeks for purposes of therapeutic trial in doubtful cases. It is unlikely that this delay adversely affects the prognosis even if the lesion proves to be malignant.

In the event continued medical management appears to be justified, x-ray examination is repeated at intervals of three and then six months for at least two years. Recurrence of gastric ulcer after apparent healing is taken to mean that the lesion, if not malignant, will very likely not respond satisfactorily to medical treatment and should be surgically removed.

SURGICAL CONSIDERATIONS

Sporadic attempts have been made to treat gastric cancer by means of radiation, including the use of direct radiation com-

bined with surgical exploration. Generally speaking, however, the treatment of gastric carcinoma is surgical removal of the primary lesion and all accessible metastases. Hence, every effort must be made to get more patients with the disease operated on and more lesions resected.

If resection is confined largely to cases which appear to have a favorable outlook, the operative mortality will be low and the *per cent* of long survivors following resection may be appreciably large. However, the goal of having a greater *total number* of people alive will not be attained. In a recent study of 30 patients who survived resection for malignant tumor of the stomach and who lived five or more years following resection, Maimon, Palmer and Kirsner¹⁶ pointed out that symptoms of long duration, the presence of a palpable tumor mass, anemia, low hydrochloric acid content of the gastric contents, and occult blood in the stools, all lacked special prognostic significance. Nor are extent of involvement of the stomach or fluoroscopically determined immobility of the stomach reliable prognostic signs. None of these findings should contraindicate operation and an attempt at resection.

Approximately 25 per cent of patients coming to autopsy with carcinoma of the stomach show involvement only of the stomach and adjacent lymph nodes⁹. If the perigastric nodes are not involved by metastatic carcinoma^{6,8}, and if the gross appearance of the lesion according to the Borrmann classification is Type I or II rather than Type III or IV¹², the outlook is much more favorable. Similarly, if the tumor histologically is Grade 1 or 2 rather than Grade 3 or 4 according to the classification of Broder^{4,7}, or if it shows certain morphologic characteristics such as circumscription and retrogressive changes in the cells¹⁷, the chance of the patient surviving for a long time after its removal is much better. However, these influential prognostic factors cannot be determined short of exploration and extirpation of the neoplasm. The decision to withhold operation, therefore, should be made only in the event of obvious widespread or peritoneal metastasis or in the presence of grave associated disease which contraindicates extensive surgery.

The current trend is decidedly toward more radical resection with removal of adjacent organs if necessary. Even discrete metastases in the liver and spleen have been removed with some measure of success¹⁸. If

removal of the entire stomach is the only way the growth can be completely excised, then total gastrectomy should be the procedure employed and not a lesser resection simply because the latter is safer. I, for one, would be willing to accept a higher mortality rate if this meant that more cases would be operated on and resected and hence a greater number of patients given a chance to be cured.

If the findings at operation disclose metastasis or local extension to such a degree that complete removal of the tumor cannot be accomplished, resection of the stomach is still the procedure of choice. Palliative procedures such as gastro-jejunostomy benefit the patient little if at all. State and his associates⁵ have reported an average survival period of 22.4 months in their patients who recovered from gastric resection but subsequently died from carcinoma of the stomach. Even in their patients with evident metastatic carcinoma of the liver, gastric resection resulted in an average of 15 months of palliation.

SUMMARY AND CONCLUSIONS

Cancer of the stomach is a frequent disease with a distressingly poor outlook. The surgical treatment of gastric cancer has grown steadily more radical and less hazardous. However, the diagnosis of the disease is still tardy and the great problem yet to be solved is early diagnosis. When this is accomplished and the improvement in operative technics applied more widely, there will be an appreciable salvage of life and a brightening of the present gloomy outlook.

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NEWER CONCEPTS IN THE TREATMENT OF BRONCHIECTASIS*

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Bronchiectasis is a dilation of the bronchial tree associated with functional and anatomical changes that are irreversible. The cause of bronchiectasis is not always clear, and the symptoms vary greatly in their manifestations. While the purpose of this paper is to speak of treatment of bronchiectasis, a word will be said about the etiology and symptomology.

Bronchiectasis occurs in approximately two per cent of the population. This means that in the United States there are about 2,800,000 people with bronchiectasis, and in the state of Oklahoma there are over 47,000 cases. It is estimated that 20 per cent of these people are asymptomatic or give none of the usual symptoms that we associate with bronchiectasis. About 20 per cent of them are masquerading under the diagnosis of bronchitis, and many under the diagnosis of pulmonary tuberculosis.

Bronchiectasis has four peculiarities that distinguish it from other lung diseases.

1. It is a disease primarily of youth.
2. It is found as an isolated disease in an otherwise normal lung.
3. It involves certain segments, or lobes, of the lung adjacent to normal lung tissue.
4. It is progressive only in the presence of pneumonia, or other acute infections.

Because it is an isolated disease in an

otherwise normal lung, and because it involves definite segments it is particularly amenable to surgical removal.

The causes of bronchiectasis are several. The most common causes are the following:

- A. Chronic infection, or bronchitis.
- B. Atelectasis.
- C. Bronchial stenosis.
- D. Congenital anomalies.
- E. Pneumonia, or pneumonitis.
- F. Any combination of these factors.

We all are aware of the symptoms of severe bronchiectasis. They are chronic cough, with huge production of puss laden sputum, dyspnea, foul breath, poor nutrition, poor development, bouts of hemoptysis, and so forth. However, I want to emphasize two facts. Bronchiectasis, in 20 per cent of the cases, produces no symptoms or minimal symptoms with a persistent *dry* cough. Though bronchiectasis is second only to tuberculosis in it's frequency it is more commonly the cause of hemoptysis than is either tuberculosis or cancer. This is particularly true in young individuals.

The treatment of choice in bronchiectasis is, of course, prophylaxis. Prophylaxis consists of the prevention of atelectasis or bronchial stenosis that so often occurs as a complication of measles, whooping cough, pneumonia, and other childhood diseases. These patients should be X-rayed routinely and areas of atelectasis, or stenosis be aspirated. Chronic cough, and chronic infections, such as sinusitis, tonsillitis, and other

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childhood troubles should be treated ardently at their inception in order to forestall the possibility of bronchiectasis. Bronchiectasis is rarely congenital.

Bronchiectatic changes in the segmental bronchi having once occurred, are not reversible, and the only method of treatment of the disease after it has become established is surgical removal. Since the disease spreads only during acute exacerbations, medical treatment can be directed only toward prevention of spread of the disease as well as the treatment of the concurrent pneumonitis and pneumonia that so frequently is seen in these patients. One cannot hope to cure bronchiectasis by medical means.

Of recent years more interest has been taken in the detailed anatomy of the lung, and it has been pointed out by several anatomist that the lung is composed of certain segments.

Pulmonary Segments:

A. Right Lung

a. Upper Lobe

1. Apical Segment
2. Anterior Segment
3. Posterior Segment

b. Middle Lobe

1. Medial Segment
2. Lateral Segment

c. Lower Lobe

1. Superior Segment
2. Anterior Basal Segment
3. Posterior Basal Segment
4. Medial Basal Segment
5. Lateral Basal Segment

B. Left Lung

a. Upper Lobe

1. Apical-posterior Segment
2. Anterior Segment
3. Lingula
 - 1) Superior Segment
 - 2) Inferior Segment

b. Lower Lobe

1. Superior Segment
2. Lateral Basal Segment
3. Anterior-Medial Basal Segment
4. Posterior Basal Segment

These segments are quite consistent in their position and size, and can be definitely distinguished by the installation of lipiodized oil into the bronchial tree. The segments having been identified can be removed individually thus removing completely the diseased portion of the lung, and leaving the adjacent normal lung tissue.

Each segment of the lung has its own bronchus and its arterial blood supply. The

bronchus and artery can be identified by hilar dissection and these structures ligated and the segments removed. The venous return is not consistent and is largely accomplished by means of an intrasegmental vein. This vein can be identified at the time of segmental resection and its branches to the segment being removed may be ligated by individual ligation at the time of the segmental resection.

The advantages of segmental resection over lobectomy are these.

1. Only diseased portions of the lung are removed.
2. All possible normal lung is retained.
3. No vital capacity is sacrificed.
4. The remaining lung need not re-expand to fill such a large space as in lobectomy, therefore there will be less emphysema of the remaining lung and less rotation of the bronchi of the remaining organ.
5. Bilateral bronchiectasis can be surgically attacked and bilateral disease removed.

This, therefore, allows us to operate on a larger number of cases and offer help to people with extensive disease who previously were not accepted for surgery. It also allows us to expect a better result in all cases after surgical removal of the bronchiectatic progress.

Patients with bilateral disease will require two operative procedures, that should be done six to eight months apart. The lung with the most severe disease, in most cases, should be attacked first. The months intervening allow the remaining lung, on the operated side, to fully take over its function, and obtain its maximum usefulness.

In conclusion, then, I suggest that segmental resection of the lung for bronchiectasis, is a more satisfactory method of treatment because it allows us to operate on more extensive disease and it gives us better results in all cases operated for bronchiectasis, regardless of the extent of the disease. I therefore believe that all patients suspected of bronchiectasis should be studied by adequate bronchography by means of lipiodol. The involved segments or lobes should be identified and if the extent of the disease, and the condition of the patient, warrant it, surgery should be undertaken.

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AUREOMYCIN AND CHLOROMYCETIN*

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In the past eight years there has been intensive research in the field of antibiotics. Today, however, there are only a few of these in general use. It is well to distinguish the antibiotics which have their origin in the metabolic products of the usual molds or filamentous fungi, from those attributable to bacteria. In the latter group, established to date, are gramicidin, tyrothricin and bacitracin. This paper is concerned with a brief review of the literature on the new antibiotics derived from two new species of streptomyces, aureomycin and chloromycetin.

AUREOMYCIN

Aureomycin was first described by Dr. B. M. Duggar,¹ Lederle Laboratories Division, American Cyanamide Company. It was derived from a strain of streptomyces aureofaciens, a soil organism. Many experimental and clinical facilities were put to work immediately and in a relatively short period of time a great deal of information has been obtained.

The name aureomycin was derived from the fact that a golden yellow pigment is produced at a certain stage in the growth of the colony of the fungus, streptomyces aureofaciens. Aureomycin is supplied as the sterile amorphous hydrochloride. It is freely soluble in distilled water to a concentration of two per cent and produces a golden yellow solution having a pH of 4.5. The drug deteriorates rapidly at room and incubator temperatures in neutral or alkaline solution.⁵

The pharmacology of the drug has been well described.² Its toxicity was low with almost no side reactions. In dogs there was irritation of the perivascular tissues at the site of intravenous injection. The subcutaneous and intramuscular injections were also irritating. There was no evidence of chronic toxicity in mice, rats and dogs given 100 to 200 mg. per kilogram per day orally for 12 weeks. It did not modify the vasomotor action of epinephrine, acetyl choline, or histamine; or the effect of vagal stimulation upon the heart. It was a mild

diuretic, about one-third as active as caffeine and did not produce albuminuria. There was no effect on the blood sugar, isolated intestine or uterus and it did not potentiate or inhibit histamine. It was not an antipyretic in rabbits or rats. After oral doses, it appeared in the urine in one hour and its excretion continued actively for six to 12 hours. Therapeutically effective concentrations existed in the cerebrospinal fluid within six hours after an intravenous dose.

Studies on the absorption, diffusion and excretion in humans were reported recently.³ Following oral administration aureomycin was readily absorbed into the general circulation. The serum content rapidly approached therapeutic levels after single doses of 0.75 to 1 gm. The activity may be present in the serum for 24 to 30 hours. As was pointed out by the authors this prolongation of action was in striking contrast to the serum content of the blood following single doses of previously available antibiotic agents. A concentration of two to four micrograms per milliliter could be maintained by the administration of 0.75 to 1.0 gm. every six to eight hours orally. Multiple doses and repeated and prolonged administration did not result in concentrations higher than eight micrograms per milliliter. In man aureomycin diffused readily in the cerebrospinal fluid in amounts which might be considered therapeutically effective. Studies revealed that aureomycin diffused through the placenta and was available in the fetal circulation. When there were therapeutically effective amounts present in the serum, diffusion occurred into the pleural fluid. It was concentrated in the normal hepatic system and was excreted in the bile. It has been found to be rather generally distributed throughout the body and in the liver, kidney, spleen and lung.

After a single oral dose of 0.5 to 0.75 gm. was given to fasting normal subjects⁴ antibiotic activity was recovered in the urine for more than 33 to 55 hours. It was excreted in high concentrations between two and eight hours. The findings suggested that the optimum intervals between oral doses

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should be about eight hours.

The preliminary *in vitro* studies were made beginning in November, 1947. Aureomycin was less effective than polymyxin and penicillin against the gram-negative bacilli and the gram-positive cocci, respectively. An exception to this was noted when six strains of *Streptococcus fecalis* were found to be more susceptible to aureomycin than penicillin. Streptomycin was more effective than aureomycin against *E. coli* and *K. pneumoniae*. It is believed that aureomycin is bacteriostatic rather than bactericidal in its effect. Both blood and serum exert an antagonistic effect on the activity of this antibiotic. In order to obtain an inhibitory concentration in the presence of 50 per cent serum, fifty times the concentration was necessary as compared with that in broth.⁶

Other *in vitro* studies^{6, 7, 14} revealed the following. A concentration of aureomycin of one microgram per cubic centimeter or less almost completely inhibited strains of hemolytic streptococci, pneumococci, gonococci and meningococci. A concentration of 25 micrograms per cubic centimeter or less was required to inhibit staphylococci and strains of gram-negative bacilli, including typhoid and other salmonella. Strains of *Proteus vulgaris* and of *pyocyaneus* were resistant and required from 100 to 250 for complete inhibition. Using weight as a basis of comparison, aureomycin was less effective than penicillin against most of the coccic organisms but was as effective as streptomycin against most of the gram-negative bacilli.⁷

Other tests suggested that aureomycin was effective against organisms of the typhoid-salmonella group, infections with the rickettsia and viruses of the psittacosis-lympho-granuloma venereum group.⁸

It was found to be effective in the treatment of experimental relapsing fever in mice and in experimental leptospirosis in hamsters.⁹

In the treatment of *Brucella* infections in mice aureomycin combined with streptomycin or with dihydrostreptomycin was found to be the most effective.¹⁰

Aureomycin was found to be ineffective against fully grown or resting cultures. It was effective only against vigorously multiplying organisms.⁷ It was more efficacious in an acid than an alkaline medium. There was no significant tendency found for the development of resistance in organisms to aureomycin either *in vitro* or *in vivo*. No aureomycin inhibiting substance similar to

penicillinase was demonstrated in the filtrates of aureomycin-resistant organisms.

The toxic effects are minimal. The most frequent complaint with large oral doses was looseness of the bowels which was not a true diarrhea. Nausea and vomiting occurred after one or more doses. Occasionally a patient with cystitis complained of a disagreeable sensation in the pelvis, which may have been due to the high acidity of the urine during treatment with large doses. There was no anemia, nor was depression in the granulocytic series observed. There was no evidence of renal irritation, liver impairment or jaundice developing after treatment was started. No fever or rashes were observed.

It was found that oral¹³ administration of large doses produced a very marked suppression of the bacterial flora of the intestinal tract. This pronounced reduction of the bacterial flora may impair the synthesis and absorption of essential nutrients.

Aureomycin may be given intravenously.¹³ It was given in doses of 0.5 gm. at 12 hour intervals, administering this amount in 250 to 500 cc of solution. Venous irritation, however, will occur even with this method.

The following summaries are a review of the clinical use of aureomycin.

AUREOMYCIN IN OCULAR DISEASE¹⁵

....PATIENTS—One hundred cases of ocular disease were treated.

ADMINISTRATION—Used locally as a 0.5 per cent solution of a borate salt having a pH of 7.5 to 7.8 when dissolved in isotonic sodium chloride solution. The activity of the solution disappears in 24 hours.

TOXIC EFFECTS—It was mildly irritating to the noninflamed eye and was entirely non-irritating to the inflamed conjunctiva.

RESULTS—It was effective against staphylococci, pneumococci, influenza and inclusion conjunctivitis. It was also effective in cases of Mooren's ulcer and atypical Mooren's ulcer of unknown cause. It had some effect in epidemic keratoconjunctivitis if treatment was begun before the fourth day of the disease. No cases of trachoma were treated in this series.

AUREOMYCIN IN PRIMARY ATYPICAL PNEUMONIA¹⁶

PATIENTS—Thirteen consecutive cases of primary atypical pneumonia were treated.

DOSAGE—A priming dose of 100 to 250 mg. every hour for three doses was used, followed by the same dosage every two hours until the patients became afebrile.

Then 15 to 20 mg. per kilogram of body weight was given every four to six hours for two to five days.

TOXIC EFFECTS—There was drowsiness. Nausea was present in six cases prior to therapy but did not interfere with the oral dosage schedule.

RESULTS—There was a striking clinical response in this group of patients which were severely ill and required hospitalization. Nine of the patients became afebrile in 24 hours, three in 24 to 48 hours and one in 72 hours.

AUREOMYCIN IN LYMPHOGRANULOMA VENEREUM¹⁹

PATIENTS—Aureomycin used for the first time in human beings. Twenty-five cases of Lymphogranuloma Venereum were treated. These were divided into three groups: (1) buboes, (2) proctitis with or without ulceration, and (3) benign cicatricial rectal strictures.

DOSAGE—It was given intramuscularly in daily dosage of 10 mg. in some cases, 20 mg. in others and in one case 40 mg.

TOXIC EFFECTS—An anemic factor found in the early cases was due to the special diluent which was used.

RESULTS—The eight patients with buboes showed a decided reduction in the size of the node at the end of four days of treatment. The three patients with proctitis showed decided improvement in two instances after four days and the other after eight days. The 14 cases with benign rectal stricture showed a decided decrease in rectal pain, discharge and bleeding. There was an increase in the diameter of the stool in this latter group.

AUREOMYCIN IN Q FEVER²⁰

PATIENTS—Nineteen cases of Q Fever were treated in the state of California.

DOSAGE—The first four patients were treated with 40 mg. daily given in two injections each at twelve hour intervals. The remainder received the drug orally. In the first 24 hours a dose of 3.2 to 4.0 gm. was given and they were then maintained on 1.6 or 2.0 gm. per day for four or more days. The dose varied from 8.0 to 27.5 gm.

TOXIC EFFECTS—There were mild symptoms referable to the gastro-intestinal tract in four cases. One patient developed pruritus and soreness of the scrotum and soreness of the mouth.

RESULTS—The four patients treated by the intramuscular route were not considered satisfactory. Of the 15 treated orally, 14 showed prompt improvement. The one case

which did not respond was classified as a chronic case. Relapses occurred in two patients but both became and remained afebrile following a second course of aureomycin.

AUREOMYCIN IN ROCKY MOUNTAIN SPOTTED FEVER¹²

PATIENTS—Thirteen cases of the Eastern Type of Rocky Mountain Spotted Fever have been treated since June, 1948.

DOSAGE—Three initial loading doses were given of 2 to 5 mg. per kilogram of body weight at hourly intervals and then the same dose every two hours thereafter as maintenance therapy. The dosage schedule was changed to four hour intervals after the patient became afebrile for 48 hours. The therapy was continued for six to nine days. It was given to younger children as a solution in tap water or in a syrup.

TOXIC EFFECTS—There was occasional nausea and vomiting. In two cases the simultaneous administration of aluminum hydroxide tablets seemed to mitigate the symptoms of nausea and vomiting.

RESULTS—There was a rapid defervescence of the fever to normal by crisis with an average duration of fever of two and one-third days after initiation of the drug. The duration of the rash was shorter. The hospital stay was short and there were no complications. The authors felt that the drug was superior to paraaminobenzoic acid.

AUREOMYCIN IN BRUCELLOSIS¹¹

PATIENTS—Twenty-four patients with proved Br. melitensis infection were treated. The ages varied from four to 54 years. There were 16 females and eight males. The duration of the illness was from a few days to one year. The first sixteen cases treated received both aureomycin and sulfadiazine.

DOSAGE—On the first day 0.1 gm. was given in divided doses; second day the total dose was 0.6 gm.; third day 1.6 gm. and from then on 4 to 6 gm. per day for two weeks.

TOXIC EFFECTS—In fifty per cent of the patients about eight to twelve hours after the first dose, fever and occasionally shock-like picture (Herxheimer) developed. Great care must be exercised in using aureomycin in the allergic chronic cases of brucellosis.¹⁷

RESULTS—The results were encouraging with prompt improvement in every patient treated. The treatment appears to be suppressive but not uniformly curative.

AUREOMYCIN AND DIHYDROSTREPTOMYCIN IN BRUCELLOSIS¹⁸

PATIENTS—Four cases of Brucellosis were

treated (two *B. suis* and two *B. abortus*). Two cases had associated peptic ulcers.

DOSAGE—The average daily dose of aureomycin was 3 grams divided into 750 mg. every six hours. The average daily dose of dihydrostreptomycin was 2 grams per day given two to four times per day. In the acute uncomplicated cases therapy was continued for 12 to 14 days and in the complicated cases for 21 to 28 days.

TOXIC EFFECTS—The toxic effects were mild or insignificant. The two cases with peptic ulcer both tolerated the drug.

RESULTS—To date the combined treatment appears to be the most effective method of treating Brucellosis.

AUREOMYCIN IN OTHER INFECTIONS

GONORRHEAL URETHRITIS⁷—Sixty-six patients were given 1 to 3 gm. in one to two days. The results were good in 49, doubtful in 11 and failed in six.

URETHRITIS (not gonococcic)⁷—Two patients were given 4 gm. in seven days with good results.

PNEUMOCOCCIC PNEUMONIA⁷—Four patients were given 5 to 20 gm. in five to 10 days with good results.

MENINGOCOCCEMIA, ACUTE⁷—One patient was given 4 gm. in three days with good results.

TYPHOID FEVER⁷—Five patients were given 3 to 39 gm. in from 13 to 22 days. The results were good in one, doubtful in two and failed in two. One patient who was a carrier was given 23 gm. in 31 days with failure. A pure culture of typhoid was obtained at surgery from the gall bladder.

SALMONELLA, ENTERITIS, SEVERE⁷—Two patients were given 5 to 7 gm. in three to eight days. The results were good in one and failed in the other.

SALMONELLA SUIPESTIFER BACTEREMIA⁷—One patient was given 21 gm. in 11 days and failed. He was also given 20 mg. intramuscularly every 12 hours.

SEVERE INFECTIONS OF THE URINARY TRACT⁷—Sixteen patients (seven of these were given two separate courses for relapses of infection and are each listed twice under results) were given 3 to 28 gm. in from three to 28 days with the results good in six, doubtful in 15 and failed in two.

ESCHERICHIA COLI BACTEREMIA⁷—One patient was given 22.5 gm. in 15 days with failure.

TREPONEMA PALLIDUM¹³—Two cases of acute, dark field positive syphilis were treated. The first case received a total of 44.2 gm. Treatment was begun with 400 mg.

every four hours then increased to 750 mg. and then decreased to 500 mg. every four hours. A febrile Herxheimer was noted 24 hours after treatment was started. The dark field was negative 60 hours after treatment was begun. The second case received 750 mg. every four hours for fifteen days and 16 hours after treatment was begun the dark field was negative.

CHLOROMYCETIN

From a soil sample collected in a mulched field near Caracas, Venezuela²¹ and at about the same time also obtained from a compost on the South Farm of the University of Illinois at Urbana, Illinois²⁰ a streptomycetes sp. was isolated. The streptomycetes that was isolated differed from those previously described and was therefore believed to be a new species for which the name *venezuelae* was proposed.³¹ When the organism was grown, filtrates of the cultures proved to possess marked anti-bacterial activity against several gram-negative bacteria, notably *S. paradysenteriae* (Sonne), and gave indications of anti-rickettsial activity. From these filtrates a crystalline antibiotic was isolated, for which the name chloromycetin was proposed. Following this discovery chloromycetin was synthesized in the Parke-Davis Research Laboratories and is now being prepared synthetically.

Chloromycetin is a neutral compound and contains both nitrogen and nonionic chlorine.^{21 30} It was stable at room temperature in aqueous solutions²⁸ over the pH range of two to nine for more than 24 hours, and in distilled water was unaffected by boiling for five hours.

In screening tests, using chick embryos, chloromycetin showed marked chemotherapeutic activity when tested against *R. prowazeki*.²¹ It showed similar activity against a number of rickettsiae and one virus when tested in embryonated eggs or in mice.²¹ The rickettiostatic effect of the drug in embryonated eggs infected with *R. orientalis* was good.²¹ The chemotherapeutic effect observed in treated mice infected with scrub typhus was as satisfactory as that obtained experimentally. Good chemotherapeutic activity was obtained in embryonated eggs infected with the agent of rickettsialpox (*R. akara*). Similar results were obtained with *R. mooseri*, *Dermacentroxenus rickettsi*, or with strains of psittacosis.²²

Antibiotic activity was observed against many different bacteria of the gram-negative and gram-positive groups, including

some acid-fast bacteria.²⁹ *Pseudomonas aeruginosa* was not inhibited in any of the tests. Preliminary studies to date showed the absence of any substances toxic to guinea pigs.

The work on chloromycetin is still at an early stage. In vitro it was inactive against yeasts, filamentous fungi and protozoa. It was moderately active against mycobacterium tuberculosis and active against *Borrelia recurrentis*. It afforded no protection, in vivo, against avian malaria in ducks, syphilis in rabbits, pneumococcic and streptococcic infections in mice, St. Louis encephalitis and fixed rabies virus infections in mice or in eggs.³⁰ The antibiotic was found to be ineffective in the treatment of mice infected with Japanese encephalitis virus and in eggs infected with variola virus and influenza A virus. There was moderate protection against *Klebsiella* and *Shigella* infections in mice.³⁰

The greater part of an oral dose was excreted or presumably destroyed in six to eight hours. Less than 10 percent of the dose appeared in the urine. The authors³⁰ felt that this indicated extensive inactivation by the body and perhaps excretion by other routes. Serum levels of two to six micrograms per milliliter were maintained with repeated doses. There appeared to be satisfactory diffusion into the body fluids.

Chloromycetin was first given to normal adult males in single doses of 2.0 gm. and in daily doses of 1.0 gm. for 10 days without untoward reactions.²³ Appreciable amounts of the drug were present in the blood and urine of volunteers 30 minutes after oral administration. In the test where two males received a single dose of 1.0 gm. and then 1.0 gm. daily for 10 days, the peak values for both blood and urine were recorded for the first specimen collected after the initial dose, i.e., at two hours. Subsequently the blood levels steadily fell in both subjects and detectable amounts of the drug were not demonstrable at eight hours or thereafter. The urine levels of the drug were approximately 200 micrograms per cubic centimeter at two hours; they fell to approximately 50 at eight hours and remained at about that level for the next 10 days of treatment. Approximately 10 per cent of the total amount of chloromycetin given daily was recovered in an active form in the urine. Excretion or inactivation of the drug occurs rather rapidly, hence, in order to maintain appreciable levels of the antibiotic

in the blood, frequent administration of the drug is indicated.

The following summaries are a review of the clinical use of chloromycetin.

CHLOROMYCETIN IN TYPHUS FEVER (EPIDEMIC AND MURINE)²⁴

PATIENTS—Five patients were treated in a hospital in Mexico, D.F. There were three adults and two children.

DOSAGE—The dosage which follows is suggested in the future. An initial dose of 40 mg. per kilogram of body weight, given in divided amounts at two hour intervals, until obvious improvement in the patient's condition is noted; subsequently a maintenance dose of 20 mg. per kilogram of body weight per day is given in divided doses at four hour intervals, until 13 to 14 days after the onset.

TOXIC EFFECTS—There were no toxic effects.

RESULTS—The results were sufficiently encouraging to warrant further tests with the drug.

CHLOROMYCETIN IN SCRUB TYPHUS²⁶

PATIENTS—Twenty-five patients with scrub typhus were treated.

DOSAGE—An initial oral dose of approximately 50 mg. per kilogram of body weight was given and subsequently 0.2 to 0.3 gm. of the drug every two to four hours for a variable time. In the initial part of the work treatment was continued until at least the twelfth day after onset. The duration of treatment was gradually shortened and the last seven cases were given the drug only 24 hours and these received a total of about 6 gm. during this period.

TOXIC EFFECTS—There were no toxic effects.

RESULTS—The last febrile day of the illness averaged 7.5 days in the treated group and 18.1 days in the untreated. The patients were discharged from the hospital on an average of 19.2 days in the treated group as against 30.7 in the untreated. There were no complications and no deaths in the treated group.

CHLOROMYCETIN IN ROCKY MOUNTAIN SPOTTED FEVER²⁷

PATIENTS—This is a report of therapy in 15 proved cases.

DOSAGE—The initial dosage was 50 mg. per kilogram of body weight which was raised to 75 mg. administered in two to three parts at approximately hour intervals. After the initial dosage the drug was given at three hour intervals day and night. Arbi-

trary dosages employed were 0.25 gm. every three hours for children under 16 years of age (ten cases) and 0.5 gm. for those above this age.

TOXIC EFFECTS—There were no toxic effects.

RESULTS—It is an effective agent in the treatment of Rocky Mountain spotted fever. A very much larger experience is required to demonstrate whether such a brief course of treatment is adequate to eliminate completely the rickettsial infection. It is possible that incomplete therapy might be followed by a latent form of Rocky Mountain spotted fever.

CHLOROMYCETIN IN TYPHOID FEVER²⁵

PATIENTS—Ten cases of typhoid fever on the Malayan Peninsula in the vicinity of Kuala Lumpur were treated. These cases were clinically of severe type.

DOSAGE—The initial dose was 50 mg. per kilogram of body weight. Thereafter, 0.25 gm. was given every two hours until the temperature was normal and the same dose every three to four hours thereafter during the first five days of normal temperature.

TOXIC EFFECTS—There was no clinical evidence of toxicity.

RESULTS—Clinical improvement was noted within 24 hours. In the first seven cases the temperature reached normal levels after three days of treatment. Two of the ten patients developed relapses and in both the recurrent infection responded promptly to a second course and the organisms in vitro were just as sensitive. Two serious complications, one perforation and one massive hemorrhage from the gastro-intestinal tract occurred, on the second and the fourth afebrile days respectively. Both recovered after a stormy course.

SUMMARY

The evidence to date reveals that aureomycin is less effective than penicillin against most of the coccic organisms but is about as effective as streptomycin against most of the gram negative bacteria. In my opinion aureomycin should be reserved for use, at present, in those cases in which the strain of organism becomes resistant to penicillin and streptomycin or in those who, for some reason, are unable to take either drug. It is of therapeutic value in primary atypical pneumonia, lymphogranuloma venereum, Q fever and Rocky Mountain spotted fever. In combination with dihydrostreptomycin it appears to be most effective method of treating Brucellosis, with a warning that much care must be exercised in the allergic chron-

ic cases. It is effective against staphylococic, pneumonia, influenzal and inclusion conjunctivitis.

The work on chloromycetin is at an early stage. At present the results are encouraging in the treatment of typhus fever, Scrub Typhus and Rocky Mountain spotted fever. Much more experience is required to demonstrate completely the effect of the drug on these diseases. In the treatment of typhoid fever, the results to date have been better than with any previous agent.

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THE ROLE OF THE UNIVERSITY HOSPITAL IN THE CANCER PROGRAM*

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The cancer problem has been attacked with increasing vigor during the past few years. The medical profession has been joined and urged on by governmental agencies through which flow millions of dollars for the cancer program, by vigorous private organizations gathering additional millions of voluntary contributions to fight cancer, by the lay press presenting the story of cancer in ever more frequent reports, and by the lay public stirred to new heights of awareness as to the nature and danger of cancer. Research investigation into the basic problems of neoplasia are in progress in laboratories throughout the country. The search for a simple test for cancer is being strongly pressed. Possible new therapeutic agents are being constantly sought for. More precise techniques of irradiation and more radical surgical procedures have been brought forward for trial and evaluation. The Journal of the A.M.A. has recently completed a series of comprehensive articles on cancer. In Oklahoma as in certain other states, the profession is being circularized with a series of cancer bulletins furnished by the state office of the American Cancer Society. The national office of this same organization is now presenting a new series of special cancer monographs prepared by outstanding authorities in the field. Special courses, lectures and meetings devoted to the problems of cancer are being continually provided for the practicing physician. Special clinics for the detection, diagnosis and treatment of cancer are increasing in number. Enlarged programs for cancer teaching in the medical schools of the country have been encouraged by generous grants of money from the United States Public Health Service during the past two years. Altogether, the tremendous effort being currently brought to bear to solve the cancer problem is startling, if not overwhelming. Some thoughtful physicians honestly feel that the emphasis on cancer may be getting a little out of proportion. Others feel that the emphasis is inadequate yet; that the problem merits even

greater attention in schools, laboratories, hospitals, and in practice. I would not presume to labor these points of view, or to put an evaluation on the over-all cancer program as it has thus far developed. Rather I would like at this time to present briefly for your consideration the activities of the Oklahoma University Hospital in regard to the cancer program.

The University Hospital receives a large number of cancer patients from all parts of the state. A recent survey showed that 11 per cent of all in-patient admissions and four per cent of all out-patient visits were cancer cases. During the past year more than 1100 individual cancer patients have been handled in the University Hospital. Treatment and responsibility for follow-up of these patients is delegated to the various departments concerned. In some institutions comparable with the University Hospital, special Tumor Services have been set up, to which all cancer cases are referred for management by a special staff. Advantages claimed for this system are greater concentration of interest, skill and experience in such a specialized staff, greater uniformity of therapeutic procedures, more convenient collection of statistical data, and perhaps a more satisfactory follow-up of cancer cases. However, because of the unusually large proportion and actual number of cancer patients in the University Hospital, and the necessary reliance on a part-time staff for the major portion of the actual care of the patients, such a highly specialized sub-division has not been considered wise for our purposes.

Yet, the policy of departmental responsibility for the management of cancer cases is at the present time supplemented by a Tumor Clinic organization which was instituted early in 1948. At that time a Tumor Clinic office was set up for the purpose of maintaining an active file of all cancer patients, of participating in the continual follow-up of these patients, of providing ever-current diagnosis and name index files, and of conducting weekly conferences for the presentation and discussion of particular

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patients, selected because of their unusual interest from the point of view of diagnosis, treatment, or management. It has been felt that by means of this organization, the cancer work of the hospital can be better coordinated, interest on the part of the staff increased, care of the patients improved, follow-up studies of the patients extended, and investigative work in the field of cancer stimulated.

The problem of follow-up is in itself a big job. One secretary is occupied full time with this work which begins with the preparation of the patient's individual file card, providing entries for pertinent data as to diagnosis, treatment and course. This card is initiated when the diagnosis of cancer is first made. Subsequent entries are made continually thereafter as treatment and follow-up observations progress. Appointment books for return visits are kept for the various follow-up clinics. The secretary makes daily checks of the attendance at each clinic, and delinquent patients are contacted by mail at once. When patients continue to be delinquent, efforts are made to contact the patient through relatives, family doctor, or local agencies. Even then, a few patients drop out of sight. It is hoped that in the not too distant future, we may be assisted by the State Department of Health, through its county units, in maintaining contact with more nearly 100 per cent of our patients.

The weekly Tumor Clinic Conferences have proved to be particularly helpful from several points of view, and the active participation of members of the visiting and house staffs has been remarkably good. During the first year of its operation, 43 weekly conferences were held, each for a two-hour period on Thursday mornings. A total of 182 patients were presented and fully discussed. The procedure used in the conduct of these conferences has been that the resident physician presents a prepared summary of the history and pertinent findings of the case. X-ray films are presented by the radiologist. Pathological specimens including microscopic slides are demonstrated and discussed by the pathologist. The patient is available for immediate further examination by those present. Discussion is then carried on, amounting in most instances to multiple consultations. Recommendations are offered by the consultants, but responsibility for final disposition of the case remains with the staff physician whose patient it is. Subsequent reports of progress

are then expected at later conferences. During the past year the average number of doctors attending each conference has been 36, an average of 22 from the visiting staff and 14 from the house staff. The full proceedings of each conference are recorded and transcribed for further reference. These conferences have led to the free exchange of ideas by those participating, have allowed more doctors to gain the experience of seeing large numbers of cancer patients first hand and we believe they have resulted in benefit to the individual patients in terms of more effective management of their cases.

An integral part of the cancer activities of the University Hospital is the teaching of cancer to the medical students. This too is carried out on a departmental basis, even though there have been advocates elsewhere of the so-called "vertical plan" of teaching cancer, that is by the establishment of a special Department of Oncology.

The teaching of cancer has received a great stimulus during the past year or so, in the form of grants of money made to the various medical schools by the United States Public Health Service for the specific purpose of augmenting the cancer teaching programs. The funds have been utilized in various ways by the various medical schools. Some have used the money to establish Tumor Clinics, some to establish Departments of Oncology, some to supplement programs already in operation. In our case we have allotted a considerable portion of the sum made available to enlarge the Department of Medical Illustration. As a result of thus increasing the capacity of this department, the individual records of cancer cases are being more adequately illustrated and are thereby made more valuable for teaching purposes. In addition collections of colored slides covering the various types of cancer, as well as surgical procedures and other treatment methods will be made available. It is also hoped that moving pictures and animated drawings to portray basic concepts of cancer pathology, as well as diagnostic and therapeutic procedures, may soon be forthcoming.

Another feature that these funds have made possible this year, has been the obtaining of guest lecturers, men outstanding in the various special fields of cancer work. It is planned that this policy will be continued during the coming year also.

In addition to the care of cancer patients and the teaching of cancer, the University

Hospital and Medical School provide opportunities for cancer research which will soon be augmented by the erection of the new Research Institute on the grounds adjacent to the Medical School. Studies into the fundamental problems of cancer and clinical studies of special aspects of cancer are already in progress, and more will follow. I would like to mention briefly just one project which is now in progress and that is the Cytology Laboratory which was set up a little less than a year ago. This method for the early diagnosis of cancer is, as you know, being investigated in hospitals and laboratories throughout the country. The method offers particular promise in regard to early diagnosis of cancer of the cervix and fundus of the uterus, but also may be helpful in detecting early cases of cancer of the lung, prostate, urinary tract, and stomach. Since our laboratory was set up

last year, more than 1500 cases have been studied by this method. Increasing numbers of very early cases of microscopic cancer of the cervix are being brought to light, by means of routine cytology slides. Further investigation and utilization of this method are expected to make possible the detection of more and more cases of cancer in the earliest, localized stages.

In summary, the Oklahoma University Hospital, following the best practice of leading hospitals throughout the nation, is participating actively in the cancer program. The University Hospital has a unique opportunity for service in the field of cancer because of the unusually large number of cancer patients referred to it, because of the enlarged provision for cancer teaching, because of the expanding facilities for cancer research, and because of the growing public interest and financial support.

PARTICIPATION OF A PRACTICING PHYSICIAN IN A LOCAL HEALTH SERVICE*

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The most generally accepted definition of modern public health is that given by Dr. C. E. A. Winslow, as "The science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, and control of community infections, and education of the individual in the principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and preventive treatment of diseases, and development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health."¹

The purpose of this paper is to make a definite plea for the early immunization of infants, particularly that of pertussis.

The health officer, as guardian of the health of the whole community, has a responsibility that reaches beyond his own department. He cannot discharge his responsibilities to his own clients without calling in the help of other local physicians, who

should have a share in the task of seeing that all sorts of services for children are linked together effectively, that the resources of the community, at both the physical and mental health levels, are fully developed and utilized.

The role of a practicing physician in a local health unit is chiefly in the field of preventive medicine. A definite part of a comprehensive program is the establishment of an effective immunization program.

The Public Health Statistics for the State of Oklahoma during 1947 reveal the fact that whooping cough still remains as one of the most important causes of death among infants under one year of age. In 1947, 33 of the 41 deaths from whooping cough, or 80.5 per cent, occurred in babies². Sixty per cent of the deaths occurred in infants under six months of age. This was the largest number from any of the infectious diseases, with the exception of the pneumonias in the population under one year.

Whooping cough is no doubt the most devastating acute infectious disease of infancy, exacting its heaviest toll during the first year of life. Sauer³ and Lapin⁴ have

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repeatedly written that whooping cough is an extremely serious disease during infancy. Davis and Carroll⁵ have recently studied the mortality from whooping cough in Texas. In 1943 there were one-third more deaths attributable to whooping cough than to diphtheria, measles, and scarlet fever combined for all age groups. In children under the age of one year, whooping cough caused nearly seven times as many deaths as the other deaths combined.

The well known mortality of pertussis during the first year of life, has stimulated interest in the possibility of immunization in the early months of infancy.

The long held belief that young infants respond poorly to antigens has been accepted by most authorities, and has been the reason for the general practice of deferring pertussis immunization till the sixth month. The principal reason apparently stems from the views of Dr. William H. Parke and his co-workers in their pioneer work with active immunization in children against diphtheria, which really formed the basis and pattern for much of the subsequent development of active immunization. The statement is made frequently in their papers that immunization should be deferred until six months, and this conclusion was apparently reached from the following observation:⁶

"Two thousand infants were given full doses of toxin-antitoxin on the third, eighth, and eleventh days after birth. One year later 100 were tested, and 52 per cent gave negative Schick tests. Since untreated infants gave the same result, it was evident that the combined effect of the immature cells, and the over-neutralization of the toxin-antitoxin present (because of the passive immunization derived from the mother) prevents any appreciable response to the toxin-antitoxin injections."

Recent investigations point favorably to the possibility of securing anti-body response to pertussis immunization under six months of age.

Sako and his associates⁷ and later Sako⁸ alone, immunized a very large series of infants under three months of age with alum-precipitated whooping cough vaccine. They demonstrated conclusively that this was an

effective immunologic procedure, as judged by clinical and serologic tests. Waddell and L'Engle⁹, using a fluid vaccine with a total dose of 100 billion organism, inoculated 129 infants, beginning at the age of one week, and observed that many responded with a very satisfactory titer. Recently Adams, Kimball, and Adams¹⁰ noted in small series of infants under three months of age that fluid vaccine produced a rise in antibody titer in many of them. Lapin¹¹ stated that whooping cough vaccine was without value in young infants. He states that "Theroetical analogy with other immunizations, and Sauer's discouraging results under six months of age, more than counter balance the recent work of Sako and his associates. It should be pointed out that while in 1941 Sauer¹² reported he could not protect young infants as successfully as he did those over seven months, he had no deaths, and the disease was milder in the immunized group. Sauer¹³ now believes that with the use of alum-precipitated vaccine he can obtain results in young infants that are quite comparable to those over seven months.

The work of Halpern¹⁴ and his associate has also substantiated the work of Sako and has proved that pertussis immunization can be effective in infants of one month or less as judged by clinical, serologic and skin tests.

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

President's Page

The third annual Interim Session of the American Medical Association has come and gone. And with it has come to us a greater appreciation of the serious consideration which the House of Delegates and the Board of Trustees gives to the problems before them.

Much of the business of the House of Delegates and all of the resolutions presented are delegated to appropriate committees for consideration and recommendation back to the House of Delegates. These committees are allowed 24 to 48 hours for their deliberation before the House reconvenes.

At such committee meetings not only delegates but any member of the American Medical Association is privileged to attend and discuss the matter for consideration. It was noteworthy to see how many of the officers and members of the Board of Trustees attended these committee conferences where discussion was free and open — there to learn the thinking of the membership at large.

A unanimous action of the House of Delegates, at the session just closed, affecting all of us was the establishment of dues of \$25.00 for all members of the American Medical Association to be collected in the usual manner and with the same limitations as ordinarily provided in the various states.

For over a century the A.M.A. did not collect dues. A year ago a special assessment was voted and now regular dues to carry forward a very vital function of the Association, that of assuming its fair and rightful responsibility along with others in our country to preserve us as a free people. The problem of medicine today is only a part of a far greater one which many segments of our population are recognizing and are uniting to combat — that of social regimentation!

Let us understand then only why the dues have been levied. They have been set up for the purposes of furthering an educational campaign on a national scale as to what lies ahead of us as a nation if the socialistic avalanche is not dispersed. Dues then become a part of our contribution to a crisis in our civilization. Our personal effort with our patients from day to day is another and greater contribution to the same end.

Let us not falter in either.

George H. Garrison
President.

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PUBLIC RELATIONS REPORTER

1950 POLITICAL PICTURE

At press time there is every indication 1950 will be a crucial year in American medicine's struggle for freedom. Congress will again be asked to consider compulsory health insurance, federal subsidies for medical education, and federal support of health services for all school children. The President and Oscar Ewing are expected to renew their demands for a Department of Welfare with Ewing as its Secretary. And many observers think the 1950 Congressional elections may be waged around the Truman Welfare State proposal.

DR. McDONALD APPOINTED

John E. McDonald, M.D., Tulsa, has been appointed a member of the Public Policy Committee to fill the vacancy created by the resignation of C. G. Stuard, M.D., Tulsa. Dr. McDonald is immediate past president of Tulsa County Medical Society and has taken an active part in the public relations work of the Tulsa group.

MONTHLY MEETINGS PLANNED

Expansion of the activities of the Public Policy Committee has necessitated more frequent meetings for the group for the new year. The Committee has set the second Thursday of each month for a regular meeting, to be held at 12:30 in Oklahoma City.

PRESS RADIO CONFERENCE

A Press Radio Conference at which Oklahoma State Medical Association will be host

to the newspaper and broadcasting men of the state is tentatively scheduled for the early spring months. A program that will be of interest and benefit to both groups is planned, with emphasis on better understanding between the two professions. John W. Records, M.D., Oklahoma City, has been appointed chairman of the conference.

NEWS LETTER

The publication date of the News Letter has been changed from the first to the fifteenth of each month, to eliminate conflict with the publication of the Journal and to provide more complete news coverage.

"THE ROAD AHEAD"

The Public Policy Committee has secured 1000 copies of "The Road Ahead", the significant new book by John Flynn which exposes the stealthy revolution and the unannounced plan to drive America into collectivism just as the planners and British labor unions have Great Britain.

The books will be sent to a selected Oklahoma mailing list which includes editors and educators. Every physician should read "The Road Ahead" — which has been hailed as the most important book of our time — and recommend it to friends and patients. If your local bookstore cannot supply you with a copy, you can secure one through the Executive Office, 210 Plaza Court, Oklahoma City 3.

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A.M.A. LEVIES DUES AT INTERIM SESSION

For the first time in the history of the American Medical Association, dues have been levied for membership. This action was taken by the House of Delegates at the Interim Session in Washington December 6-9.

The House of Delegates also discussed the school children's health bill and the bill granting federal aid to medical education. A report of the coordinating committee conducting the National Education Campaign and action strengthening the Washington offices of the A.M.A. also featured the mid-winter meeting.

Representatives of the Oklahoma State Medical Association appeared before the reference committee of the House of Delegates to oppose S. 1453 (federal aid to medical education) and S. 1411 (school children's health bill). The specific opposition to S. 1411 is that section of the bill which permits schools to provide medical treatment for all children regardless of financial ability of the parents. There was serious objection to S. 1453 because of the danger to freedom of medical education by any program of federal grants-in-aid. Each state association was encouraged to take effective steps towards securing its defeat.

Delegates from Kentucky submitted a resolution approved by the House of Delegates commending state associations that have already established Grievance Committees and urging all constituent associations to adopt comparable program. Oklahoma was one of the first states to organize a grievance committee and has been instrumental in promoting the program in other state associations.

In the first year's report on the National Education Campaign, the coordinating committee pointed out that expenditures for literature and printed materials totaled 75 per cent of the entire campaign budget; organization work took 10 per cent while operational expenses amounted to only 15 per cent of the budget.

The House of Delegates unanimously approved the recommendation of the Board of Trustees establishing dues for all A.M.A. members of \$25 for 1950. In the past membership in the A.M.A. has depended upon membership in the constituent state associations. The action of the House of Delegates does not require that every member of a state association pay the A.M.A. dues. It only requires that those desiring to maintain membership status of those who do not pay A.M.A. dues still remains in the constituent state association and the county societies. Fellowship in the A.M.A., which includes subscriptions to the Journal of the American Medical Association, or one of the specialty publications, remains unchanged. Fellowship dues will be as in the past, \$12 per year. The \$25 annual dues do not include the privilege of fellowship. The fellowship dues being over and above the membership dues.

The Board of Trustees was authorized to appoint a seven member coordinating committee to secure more prompt action on the expression of policy by the A.M.A. in regard to legislation introduced in Congress and to implement those policies more effectively through state and county societies. The Oklahoma representatives at the Interim Session joined in urging the reference committee to approve this recommendation.

ATTENTION GENERAL PRACTITIONERS!

The Oklahoma Academy of General Practice will hold its second Annual Meeting, March 27 and 28, 1950, in Muskogee, Oklahoma. An outstanding program has been arranged with the following speakers:

Phil Thorek, M.D., Chicago, Illinois, Surgery
William C. Mixson, M.D., Kansas City, Missouri, Obstetrics and Gynecology
Franklin D. Murphy, M.D., Kansas City, Kansas, Dean, University of Kansas School of Medicine
James G. Hughes, M.D., Memphis, Tennessee, Pediatrics
N. G. Alcock, M.D., Iowa City, Iowa, Urology
Forrest P. Baker, M.D., Tahleah, Oklahoma, Tuberculosis
Moorman P. Prosser, M.D., Oklahoma City, Psychiatry
John E. McDonald, M.D., Tulsa, Orthopedics
W. K. Ishmael, M.D., Oklahoma City, Rheumatism

A completed program will be sent to each member of the Oklahoma State Medical Association this month and you will have an opportunity to make reservations at that time.

LEGISLATURE ALLOCATES SPECIAL BOND ISSUE

The special session of the legislature which was called for the purpose of implementing the \$36 million bond issue adjourned December 23. Of interest to the profession will be appropriations to state mental hospitals of \$13,474,285 and to other state hospitals, including tuberculosis, \$1,695,691.

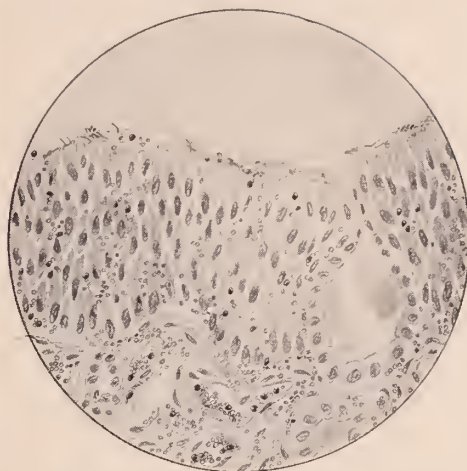
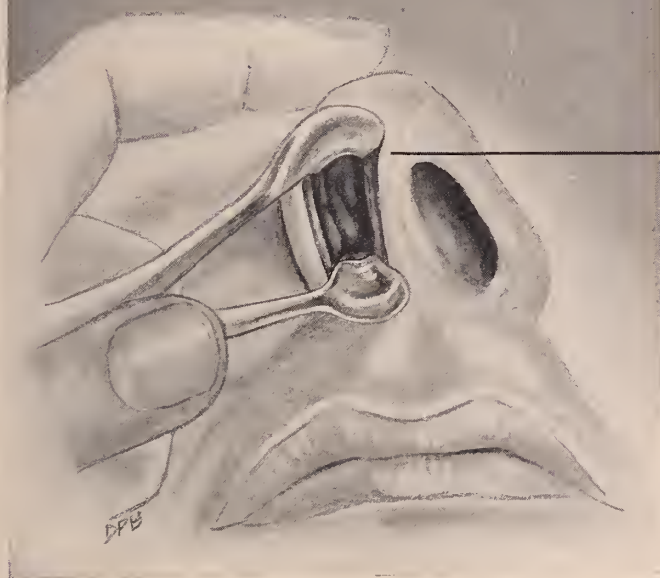
A total of \$15,994,010 was appropriated to Oklahoma regents for higher education of which \$500,000 was designated by the legislature for construction of a 50 to 75 bed neuro-psychiatric addition to the University Hospital to serve as a referral center for the examination and short time treatment of mental patients under the care of the state, and to enhance the training of medical students. \$320,000 was designated for construction of an outpatient wing as an addition to the Crippled Children's Hospital.

Of the balance, the total requests of the University of Oklahoma School of Medicine and University Hospitals as made to the board of higher regents amounted to \$1,917,000, requested for the following purposes: completion of addition to medical school building, outpatient addition to Crippled Children's Hospital, expansion of laundry and shops at University Hospitals, addition to University Hospital for food service, modernization and repair of building. Allocation of funds for these purposes will be by action of the board of higher regents.

DO YOU KNOW?

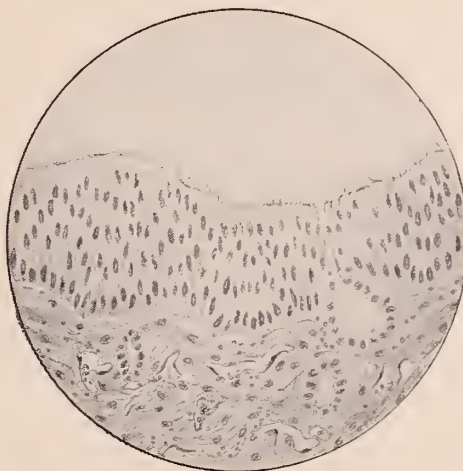
That only 114 members of the Oklahoma State Medical Association had not paid the \$25 A.M.A. assessment for 1949 by January 1, 1950? The total O.S.M.A. membership at Journal presstime was 1,525 for 1949.

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GENERAL PRACTICE SESSION SLATED SOON

O. S. M. A. members will soon receive a preliminary program which will list the titles of papers and the hours at which they will be given at the 1950 Scientific Assembly of the American Academy of General Practice. Twenty-two of the country's leading clinicians will speak on the program to be held in St. Louis, February 20-23. The meeting will be held in Kiel Auditorium with 141 technical exhibits.

TO HAVE PUBLICATION

The official American Academy of General Practice publication, "GP — Published by the American Academy of General Practice." Volume 1, number 1 will be mailed in March to reach all members by April 1. The editor, F. Kenneth Albrecht, will gather material for the first few issues. Each issue will include four or five original articles, written especially for "GP" by leading medical authors. All will conform to the journal's editorial policy of publishing only articles of general and practical value which are of immediate use.

Medical editorials, a section on "Business and Economics", a review of current literature in other journals, a monthly therapeutic conference, book reviews, a section devoted to Academy news, and many other special features will be included.

STATE GROUP FORMS HEART ASSOCIATION

The Oklahoma State Heart Association was formed December 4 when a group of 35 physicians of the state met in Oklahoma City.

Homer A. Ruprecht, M.D., Tulsa, was elected president of the state association, which will later be affiliated with the National Heart Association.

Other officers elected include W. W. Rucks, Jr., M.D., Oklahoma City, vice president; Robert H. Bayley, M.D., Oklahoma City, secretary and Wynn Langston, M.D., Oklahoma City, chairman of the board.

Although local associations had been formed in Oklahoma City and Tulsa, there was no state organization until the meeting of December 4, when Oklahoma joined most of the other states in perfecting a statewide group.

A three-fold program of research, education and community service will be sponsored by the state association, Doctor Ruprecht explained. Funds secured by the association through its cooperation with the national association in its campaign will be used to pay for research projects; to conduct an educational campaign on heart disease among the lay people and for study courses and lectures for the professional groups, and will also be used to sponsor clinics or to purchase equipment not obtainable in any other way.

Operation of the association will be similar to that of the tuberculosis and cancer associations.

Members of the board of directors elected in the organization meeting included: Douglas M. Gordon, M.D., Ponca City; W. J. Trainor, M.D., Paul T. Strong, M.D., Safety R. First, M.D. and James C. Peters, M.D., all of Tulsa; L. E. Woods, M.D., Chickasha; George Barry, M.D., F. Redding Hood, M.D., Hugh A. Stout, M.D. and Vernon D. Cushing, M.D., all of Oklahoma City.

The board of directors will eventually have 40 members, with half of them being interested laymen. Formation of an executive committee and a detailed program of activity are to be done later.

POSTGRADUATE CIRCUIT RECEIVES FAVORABLE COMMENT

Robert M. Becker, M.D. opened the third circuit of instruction in Internal Medicine January 9. The lectures will be given for ten consecutive weeks in the following centers:

Ada	Valley View Hospital	7:30 P.M. Mondays
Ardmore	Colvert's Club Room	8:00 P.M. Tuesdays
Idabel	High School Building	7:00 P.M. Wednesdays
Hugo	County Health Unit	7:30 P.M. Thursdays
Durant	Colwick Clinic	8:00 P.M. Fridays

The majority of the physicians in this area are attending the lectures in their respective centers.

Some of the comments received from the doctors enrolled in the first two circuits by the Postgraduate committee are:

"The postgraduate course in Internal Medicine by Robert M. Becker, M.D. has been completed. I just wanted to advise everyone that all the doctors who attended the lectures agree that this is one of the best courses that has yet been presented. Doctor Becker presented his lectures in a very able manner and everyone was well pleased with his personality."

"I think the subject matter was very good and was presented in a very practical way."

"This course was presented in an excellent manner by a most capable instructor."

"The course was very satisfactory — well attended by the doctors. Doctor Becker handled his subjects on Internal Medicine ably. He is a speaker above the average. Doctors taking the course expressed their appreciation by voting thanks. They also want to extend thanks to the Oklahoma State Medical Association, The Commonwealth Fund of New York, U. S. Public Health Service and the Oklahoma State Health Department for their contribution to this cause, without which, we understand, this postgraduate course on Internal Medicine would have been impossible."

"Doctor Becker's course seems to have been very well received. He is a personable young man and his opinions seem to have been well respected by the attending physicians. His lectures were very well balanced between physiology theory and practical applications. In my opinion he did an excellent job of covering as much as he did in 10 lectures."

"Doctor Becker is to be congratulated in keeping the interest of the doctors throughout the entire lectures."

"I enjoyed the lectures very much. Doctor Becker presented them well and having been recently connected with outstanding clinics was able to give us information that was quite timely. This has been the most up-to-date course we have had."

"Very fine, could not have asked for more. You should feel proud to have such a well versed physician as instructor."

"As a specialist I now have all the more respect for the general practitioner after taking Doctor Becker's general medicine course. We especially are prone to forget that general medicine is the basis of all our therapeutics and unless we connect the branches with the trunk of the tree its fruits wither. Doctor Becker gives a most complete and thorough course and leaves one feeling very humble for having gotten by in practice by knowing so little general medicine when there is so much we should know."

"Enjoyed the lectures very much. Doctor Becker did a fine job. Hope the next one does as well."

"As an old timer, taking all the P.G. courses, I wish to state that Dr. Robert M. Becker was outstanding as an instructor and a man you like."

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The Oklahoma Medical Research Foundation faces the year 1950 as the year of completion. With construction on the building located just east of the Medical School in Oklahoma City over 50 per cent complete, it is expected that the structure will be ready for occupancy during June or July. The three story building will have 56 laboratory units, an animal wing and administrative offices.

Construction on a 22 bed research hospital is scheduled to begin in May or June. This wing, to extend northward from the east wing of the Research Building, was made possible through the receipt of grants for \$225,000.00 from the National Heart Institute, and the National Cancer Institute. The hospital will not be ready for operation for approximately one year.

Members of the Research Committee of the Foundation are beginning their deliberations which are expected to result in securing of a Research Coordinator for the Foundation within the next 30 to 60 days.

RESEARCH AND BUILDING FUND CAMPAIGN

Organization for the development fund campaign of the Research Foundation is practically completed. Intended to assure the financial status of the organization so that it will be able to operate for a period of 10 years, the campaign will have two phases. One is a big gifts and special gifts division, headed by Mr. W. K. Warren, president of the Warren Petroleum Company of Tulsa. The other effort will be county campaigns in the 30 counties of Oklahoma which have not previously had an opportunity to participate in the Research Foundation establishment. Governor Roy J. Turner is again serving as General Campaign chairman.

County organizations are being perfected and it is expected that the actual campaign will be held during the month of February. This will be a lay campaign primarily, although many of the physicians of Oklahoma have indicated that they will help with the work. The 30 counties where campaigns are scheduled for this winter are: Harper, Alfalfa, Grant, Major, Noble, Pawnee, Osage, Nowata, Craig, Dewey, Payne, Creek, Tulsa, Okmulgee, Muskogee, Roger Mills, Canadian, Grady, Pottawatomie, Seminole, Hughes, Pontotoc, Greer, Jackson, Tillman, Jefferson, Carter, Bryan, Choctaw and McCurtain.

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ADVISORY HEALTH COUNCIL ELECTS OFFICERS

The Oklahoma Advisory Health Council held a one day meeting during the annual meeting of the Oklahoma Public Health Association in December.

Officers elected were Robert Cavins, Ardmore, president elect; Joe McBride, Anadarko, president; Mrs. E. Lee Ozburn, Oklahoma City, vice-president; E. Harold Hinman, M.D., Norman, secretary-treasurer. The seven board members are M. H. Newman, M.D., Shattuck; W. E. Huddleston, Konawa; Mrs. Harold Prescott, Ponca City; Mrs. John Stores, Lawton; Mrs. J. Ed Falkenberg, Enid; Everett Johnson, Tulsa; and Orion Jennings, state department of education, Oklahoma City.

"Observations on the European Health Study" was the topic of Congressman George Howard Wilson who appeared on the program. A panel discussion of "A Health Council in Action" was led by Dr. John R. Rackley, dean of the college of education, University of Oklahoma, Norman. O.S.M.A. President George H. Garrison, M.D. reviewed the role of organized medicine in public health at the evening session and Dr. Vlado A. Getting, Massachusetts commissioner of health discussed "The Citizen's Part in Public Health".

MEDICAL SCHOOL, O.S.M.A. PLAN PANEL DISCUSSIONS

Members of the Postgraduate Division of The University of Oklahoma School of Medicine are touring the state to arrange a series of panel discussions on current medical and surgical subjects to be given at selected medical centers. These meetings are part of the Postgraduate Instruction Program of the University of Oklahoma School of Medicine and the Postgraduate Committee of the Oklahoma State Medical Association. Faculty members of the School of Medicine and local members of the Medical Association will participate. The meetings are scheduled to begin by the first part of March, 1950.

BASIC SCIENCE COURSE AVAILABLE

A course in Basic Science for residents and other physicians in the Oklahoma City area has recently been inaugurated at The University of Oklahoma School of Medicine. This course is a part of the Postgraduate Instruction Program.

The first meeting was held at 3:00 p.m., Wednesday, December 21, 1949, at Will Rogers Hospital, Oklahoma City, Oklahoma. Subsequent meetings will be held each following Wednesday for approximately 16 weeks. The meetings will be rotated among the various Oklahoma City hospitals. At the completion of the course, a certificate of attendance will be given. Any interested physician is invited to attend the meetings.

NAMED TO BOARD

John H. Lamb, M.D., Oklahoma City was named to the American Board of Dermatology and Syphilology at the American Academy of Dermatology and Syphilology meeting December 5. Other Oklahomans attending were C. P. Bondurant, M.D., Oklahoma City; E. S. Lain, M.D., Oklahoma City; Carl Brundage, M.D., Oklahoma City; W. A. Showman, M.D., Tulsa; W. G. McCreight, M.D., Oklahoma City; and Harvey Foerster, M.D., Oklahoma City.



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HAVE YOU HEARD?

Avery B. Wight, M.D., was a recent speaker at the Enid Toastmaster's Club.

Loile G. Neal, M.D., Ponca City, was master of ceremonies at the recent Ponca City father-son football banquet.

Mark Holcomb, M.D., Enid, spoke to the Enid A.A.U.W. on "Some Aspects of Atomic Energy."

J. H. White, M.D., Muskogee, co-founder of the Oklahoma Baptist Hospital, was guest of honor at a recent banquet there also honoring the Nurses' Alumnae.

Paul Kernek, M.D., Holdenville, is a member of the Holdenville Kiwanis Club underprivileged children's committee and in a recent report stated that "possibly a hundred or more children have received dental fillings or extractions" through the Kiwanis club.

E. Stauley Berger, M.D., Lawton, was guest speaker at the regular weekly luncheon of the Army Wives Club.

W. G. Dunnington, M.D., Cherokee, will re-enter the army with the rank of lieutenant colonel Feb. 1. Dr. Dunnington spent five years in the army medical corps during World War II, with two and one-half years of that time in the European theatre.

Glen McDonald, M.D., Pawhuska, was toastmaster for the evening at the annual Chamber of Commerce dinner in Pawhuska January 12.

E. O. Martin, M.D., Cushing, was named chief of staff of the Masonic Hospital there. *J. D. Martin, M.D.*, was re-elected secretary-treasurer and *John W. Martin, M.D.*, was elected vice-president.

Charles Green, M.D., Lawton, was one of several Lawton business and professional men featured in an article on local success stories.

H. K. Speed, M.D., Sayre, was named to the board of directors of the chamber of commerce of that city.

R. D. Turner, M.D., Muskogee, was guest speaker at a dinner meeting of the medical technologists of the eastern Oklahoma district recently.

MEET OUR CONTRIBUTORS

Earl I. Mulmed, M.D., M.S., Tulsa, is author of "Aureomycin and Chloromycetin" in this issue of the Journal. A 1937 graduate of University of Oklahoma, Dr. Mulmed limits his practice to his specialty, internal medicine. He is a member of American Diabetes Association, Sigma Xi and Alumni Association of the Mayo Foundation and an associate of American College of Physicians. He holds the certificate of the American Board of Internal Medicine.

Henry G. Bennett, Jr., M.D., who wrote "The Role of the University Hospital in the Cancer Program" specializes in gynecology in Oklahoma City. He was graduated from Johns Hopkins University in 1936 and has been certified by the American Board of Obstetrics and Gynecology. Dr. Bennett is a member of Oklahoma City Obstetrical and Gynecological Society.

Robert L. Anderson, M.D., Tulsa, contributed the article "Newer Concepts in the Treatment of Bronchiectasis" to the February Journal. Dr. Anderson is a 1942 graduate of the University of Kansas and a member of Southwestern Surgical Congress and Columbus Surgical Society and a junior member of the American College of Surgeons. His practice is limited to thoracic surgery and he has received the first part of the certificate of the American Board of General Surgery.

Charles E. Green, M.D., Lawton, is the author of "Participation of a Practicing Physician in a Local Health Service". Dr. Green is a 1942 graduate of Indiana University and served his internship at Methodist Hospital in Indianapolis. He served in the Army Medical Corps from 1943 to 1946 and has been in practice in Lawton since 1948. Dr. Green specializes in pediatrics and is Health Director of Comanche County.

J. Edward Berk, M.D., Sc.D., guest speaker at the Annual Meeting, has a paper on "Cancer of the Stomach; Clinical Problems Influencing Prognosis", appearing in this issue. Now with the Department of Medicine of Temple University in Philadelphia, Dr. Berk was graduated from Jefferson Medical School. His specialty is gastroenterology and he is a member of the American College of Physicians, the American Gastroenterological Association, American Federation for Clinical Research, and American Gastroscopic Society. He has been certified by the American Board of Internal Medicine.

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ANNOUNCEMENTS

AMERICAN BOARD OF OB-GYN. The board has not made nor is it contemplating any changes in its residency training requirements, despite rumors of an increase in training years. Eligibility requirements remain the same — three years of acceptable formal training, followed by at least two years of post-training practice in the specialty. More detailed requirements can be obtained from Paul Titus, M.D., Secretary, American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

NEUROPSYCHIATRIC MEETING. The annual Neuropsychiatric Meeting at the VA Hospital, North Little Rock, Arkansas, for 1950 will be held February 23, 24. No charge will be made for registration. Further information may be obtained from the Director of Professional Education, VA Hospital, North Little Rock,

Arkansas.

POLIOMYELITIS SHORT COURSES. A series of short-term courses in the complete care of poliomyelitis patients for qualified physicians, nurses and physical therapists is announced by the Orthopaedic Hospital, Los Angeles. Additional information may be obtained by writing the hospital, 2400 South Flower Street, Los Angeles, Calif.

AMERICAN SOCIETY FOR THE STUDY OF STERILITY. Annual Meeting will be held June 24, 25, Sir Francis Drake Hotel, San Francisco. Secretary-Treasurer is Walter W. Williams, M.D., 20 Magnolia Terrace, Springfield 8, Mass. Information about the meeting and the annual \$1,000 award can be obtained from Dr. Williams.

BOOK REVIEWS

FUNDAMENTALS OF OTOLARYNGOLOGY. Lawrence R. Boies, M.D. 443 pages with 184 illustrations. Philadelphia and London, W. B. Saunders Company, 1949. Price \$6.50.

This is the first textbook of otolaryngology to be published in a number of years that is suitable for medical students. It will also be found useful by practitioners whose present texts in this specialty are 10 years old or more. The fundamentals of anatomy, physiology and pathology are adequately presented. Practical methods of examination, detailed special history taking, diagnosis and therapy are thoroughly presented in simple readable language. The illustrations are clear and used to explain definite useful points in the text. Numerous prescriptions for local therapy are included. Above all this book is up to date. It may not be included in the category of textbooks which are 10 years behind current practice when they are published. Incidentally it is being welcomed by many teachers of otolaryngology in medical schools.

—L. Chester McHenry, M.D.

LIFE AMONG THE DOCTORS. Paul DeKruif. 470 pages. New York. Harcourt, Brace and Company, 1949.

The propinquity of M.D.'s and Ph.D.'s in bacteriology causes each to evaluate the shortcomings of the other. This especially is the case of this author who has written 11 books in which he has gotten his material from the association with M.D.'s, wherein he writes about doctors and medicine. His facile pen produces almost monthly articles in the *Readers Digest* with writings on medical progress in the research stage which he admits causes the laity to call up their doctors with, "We have just read — how about it?"

He gets his information from association with men who are cultivating virgin soil in therapeutics and the care of the sick and afflicted by public and industrial means. On his title page he quotes Van Gogh: "To paint nature here, as everywhere, you must have lived in it a long time". Hence he chooses some four or five men he thinks have gone through hardships in

developing their innovations. His vitriolic attack on doctors as written in his first book, "Our Medical Men," he now has eased off to praise of some, but he never loses a chance to needle organized medicine and the American Medical Association. While not as interesting as "Microbe Hunters," which I think is his best, it is well written and will be well received by the reading public, as has been the case with the other writings from his fluent pen.—Lea A. Riely, M.D.

CLINICAL AUSCULTATION OF THE HEART. Samuel A. Levine, M.D., and W. Proctor Harvey, M.D. 327 pages. Philadelphia, W. B. Saunders Company, 1949.

This book presents a detailed discussion of auscultation of the heart in a concise and interesting manner. The various acoustic phenomena discussed are illustrated by simultaneous electrocardiograms and phonocardiograms. The former serve to correlate events of the electrocardiogram with those of the heart sounds; the latter illustrate what has been heard and helps the reader visualize points under discussion. There are many of these illustrations accompanied by very brief descriptions of heart findings. In some instances clinical features are discussed and in the section describing cardiac irregularities treatment is considered. There are four chapters, the first dealing with normal heart sounds, the second with cardiac irregularities, the third with cardiac murmurs, and the fourth with miscellaneous auscultatory findings such as occur in pericarditis, arteriovenous fistula, mediastinal emphysema, diaphragmatic flutter, etc.

Admitting that auscultation of the heart is only a part of the total cardiac evaluation, the authors nevertheless emphasize the importance of information which can be obtained by the use of the stethoscope and propose to "discuss in detail simple data pertaining to bedside auscultation". They have been successful in this endeavor. The book contains many valuable suggestions calculated to improve the physician's skill in cardiac auscultation. It can be read with profit by both physicians and students.—George N. Barry, M.D.



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MEDICAL SOCIETIES AROUND THE STATE

Tulsa County

W. A. Showman, M.D., former vice-president and a member of the board of trustees for five years, was named president-elect of the Tulsa County Medical Society for 1950. Other officers are Fred E. Woodson, M.D., president; Marshall O. Hart, M.D., vice-president; John G. Matt, M.D., secretary-treasurer; Thomas Hardman, M.D., board of censors member; Hugh C. Graham, M.D., and John E. McDonald, M.D., were elected to the board of trustees.

Beckham County

When the Beckham County Medical Society met at Sayre for election of 1950 officers, H. K. Speed, M.D., Sayre, was named president. Other officers are V. R. Payne, M.D., Cheyenne, secretary; and O. C. Standifer, M.D., Elk City, member of the board of censors.

Northwest Counties

Congressman George Howard Wilson spoke on compulsory health insurance and gave an account of his trip as a member of the congressional committee which visited seven European countries and England last summer at the December 9 meeting of the Northwest Counties Medical Society at the Fort Supply hospital. Guests of the society were members of the auxiliary and pharmacists, dentists, nurses and allied professions in that district.

Election of officers was held during the business meeting and E. A. McGrew, M.D., Beaver, is the new president of the group. Other officers are H. L. Johnson, M.D., Fort Supply, vice-president; C. W. Tedrowe, M.D., Woodward, secretary-treasurer; and Myron C. Eugland, M.D., Woodward, member of the board of censors.

Choctaw-McCurtain-Pushmataha

"Dental Aspects of Medicine" was the program topic when the Tri-County doctors, dentists and pharmacists met at Hugo.

Following the dinner and scientific program, election of officers was held. Floyd L. Waters, M.D., Hugo, was elected president; R. D. Sherrill, M.D., Broken Bow, was named president-elect; H. D. Wolfe, M.D., Hugo, is secretary.

Bryan County

B. B. Coker, M.D., was elected president and Roger Witt, M.D., was named secretary of the Bryan County Medical Society. During the business meeting, the group also discussed the postgraduate course in internal medicine scheduled to open there January 13.

Jackson County

Outgoing vice president Willard Holt, M.D., was elected president of the Jackson County Medical Society for 1950 at the annual election banquet. Other officers are Wayne Starkey, M.D., vice-president; and Malcolm Mollison, M.D., secretary.

Creek County

"Problem Parents and Children" was discussed by Dr. Richard Appsel of Tulsa, director of the child guidance clinic there, when he was guest speaker at the Creek County Medical Society and Ladies Auxiliary meeting. During the business session, J. F. Curry, M.D., was elected president and J. M. Bayless, M.D., was named secretary. Carl Bowie, M.D., is the new vice-president.

Garfield-Kingfisher

Speaking on socialized medicine in England, Basil A. Hayes, M.D., Oklahoma City, presented the program at the Garfield-Kingfisher County Medical Society meeting December 29.

Pittsburg County

Now installed as president of the Pittsburg County Medical Society is William P. Lerblance, Jr., M.D., Hartshorne. Other new officers are Thurman Shuller, M.D., McAlester, president-elect; E. D. Greenberger, M.D., McAlester, vice-president; H. C. Wheeler, M.D., McAlester, secretary-treasurer.

Hughes County

L. A. S. Johnston, M.D., was elected president of the Hughes County Medical Society for 1950. Other new officers are Imogene Mayfield, M.D., vice-president; and Gene Slagel, M.D., secretary.

Okfuskee County

Okfuskee County Medical Society officers were named at a recent meeting and are as follows: M. L. Whitney, M.D., president; L. J. Spickard, M.D., vice-president; S. A. Capehart, M.D., secretary-treasurer; and A. S. Melton, M.D., delegate.

Comanche County

Lawrence W. Ferguson, M.D., Lawton, is the newly elected president of the Comanche County Medical Society. Other officers are Fred Fox, M.D., vice-president; Charles Graybill, M.D., secretary-treasurer; and G. G. Downing, M.D., member of the board of censors.

Custer County

A Clinton physician, Curtis B. Cunningham, M.D., was elected 1950 president of the Custer County Medical Society. Other officers are Paul B. Lingentfelter, M.D., vice-president; and J. B. McGibrick, M.D., secretary-treasurer.

Ottawa County

Dr. James R. Amos, medical director of the American Red Cross' regional blood center at Springfield, Mo., addressed members of the Ottawa County Medical Society and the executive committee of the county Red Cross chapter at a joint meeting in Miami.

Cleveland County

Rheumatic fever was the topic when Robert H. Bayley, M.D., professor of medicine at the University of Oklahoma School of Medicine spoke to the Cleveland County Medical Society. Following the scientific part of the program, James F. Hohl, M.D., was elected president and other officers named are: Robert O. Ryan, M.D., vice-president; and James O. Hood, M.D., secretary-treasurer.

Carter County

Plans were made for the postgraduate course in internal medicine and election of officers was held at the Dec. 13 meeting of the Carter County Medical Society. Officers elected are: Pat Lawson, M.D., Marietta, president; James T. Godfrey, M.D., vice-president; Ethel M. Walker, M.D., secretary-treasurer.

Kay-Noble

For the first time a Noble County physician was named president of Kay-Noble Medical Society. He is J. W. Francis, M.D., Perry. Other officers of the group are W. O. Armstrong, M.D., Ponca City, president-elect; Merl Clift, M.D., Blackwell, vice-president; N. H. Cooper, M.D., Ponca City, secretary-treasurer. Guest speaker was Congressman George Howard Wilson of Enid who reported on a study he had made of socialized medicine.

Woods County

Kenneth Lee Peacher, M.D., was named president-elect for 1951 when the Woods County Medical Society met recently. Other new officers are D. B. Ensor, M.D., president; O. E. Templin, M.D., vice president; W. F. LaFon, M.D., secretary.

Oklahoma County

Oklahoma County Medical Society and Oklahoma City Clinical Society held election of officers December 27 following a buffet supper at the Oklahoma Club. John F. Kuhn, M.D., is 1950 president of the county medical society and other new officers are Floyd Moorman, M.D., president-elect; Allen Gibbs, M.D., vice-president; Ralph Smith, M.D., secretary-treasurer. Clinical Society officers are F. Maxey Cooper, M.D., president; John H. Lamb, M.D., director of clinics; F. Redding Hood, vice-president; Nesbitt L. Miller, M.D., secretary; and P. K. Graening, M.D., treasurer. Clinical Society dates for 1950 are October 30, 31, and November 1 and 2.

Rogers-Mayes

Members of the Rogers-Mayes County Medical Society entertained the Women's Auxiliary December 15 with a steak dinner at Miller's Farm. Corsages were presented at the door to the auxiliary members. After dinner, the group played bridge. Those present included: Dr. and Mrs. C. W. Beeson, Dr. and Mrs. R. C. Meloy, Dr. and Mrs. W. D. Anderson; Dr. and Mrs. Roy J. Melinder; Dr. and Mrs. P. S. Anderson; Dr. and Mrs. M. E. Gordon; Dr. and Mrs. K. D. Jennings; and Dr. and Mrs. W. A. Howard.

Muskogee-Sequoyah-Wagoner

Scientific program of the recent Muskogee-Sequoyah-Wagoner Medical Society featured Cleve Beller, M.D. of the University of Oklahoma School of Medicine. Officers for 1950 elected at the meeting are: C. L. Oglesbee, M.D., president; William M. Weaver, M.D., vice-president; Virgil D. Matthews, M.D., secretary-treasurer; and L. S. McAlister, M.D., censor. John H. Hackler, M.D., was elected director of the tumor clinic.

NEW MEMBERS OF O.S.M.A.

The following physicians became members of the O.S.M.A. during December, 1949. Each month a list of new O.S.M.A. members for the preceding month will be published.

Richard L. Harris, M.D., Oklahoma City
Robert McKee, M.D., Oklahoma City
John Florence, M.D., Oklahoma City
Harper Wright, Jr., M.D., Chattanooga, Tenn.
J. Neill Lysaught, M.D., Oklahoma City
George M. Rahhal, M.D., McAlester

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OBITUARIES

J. T. FRIZZELL, M.D. 1870-1949

J. T. Frizzell, M.D., Custer county's oldest physician from the standpoint of both age and years of service, died December 5 after an illness of 11 weeks.

Dr. Frizzell moved to Weatherford after graduating from medical school in Missouri in 1899. In August, 1900, he settled in Buter, where he practiced medicine for 21 years. In 1921 he came to Clinton and had made his home there since that time. He retired from active practice in 1941 and was an honorary member of the Oklahoma State Medical Association.

He was city and county health officer for many years. A deacon in the Baptist church, he was also a 32nd degree Mason and a Shriner. He was a charter member of the Butler Masonic lodge.

Survivors include his widow, one son, Raymond Frizzell, three grandchildren, two nephews, and two nieces.

D. E. CANTRELL, M.D. 1876-1949

D. E. Cantrell, Sr., M.D., pioneer Healdton physician, died November 25 following a long illness.

Dr. Cantrell was active in civic and medical organizations in Carter county and had practiced in Healdton for more than a quarter of a century.

Survivors are his widow, one daughter and two sons.

TWENTY-FIVE YEARS AGO

(From our early files of *Editorial Notes—Personal and General*)

DR. R. A. BROWN, Prague, has been appointed to take charge of the Fellows Home at Checotah, and will assume his duties about February 1.

DR. C. E. BATES, Sulphur, for two years medical officers of the Soldiers Tubercular Sanatorium, has resigned to accept a position as tuberculosis expert with the U.S.V.B. at Oklahoma City.

DR. E. F. STEPHENS, Foss, has removed to Norman.

DR. J. E. COCHRAN, Byars, has removed to Wynnewood, and is in practice there with Dr. H. P. Wilson.

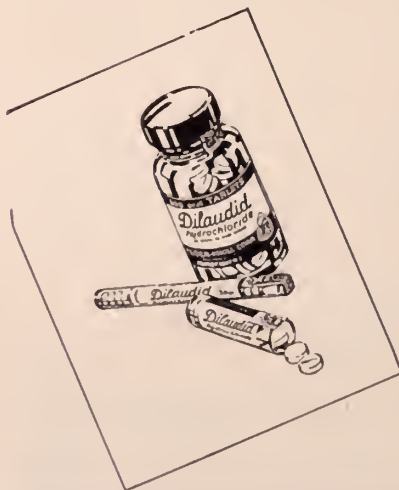
DR. GEORGE BORECKY, Oklahoma City, has been appointed to replace Dr. George Hunter in the Oklahoma City Health Department. Dr. Hunter resigning to become County health director.

DR. McLAIN ROGERS, Clinton, has purchased the Clinton City Hospital, after the question as to whether or not the city would sell it had been decided in favor of selling, at a general election.

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Powerful opiate analgesic - dose, 1/32 grain to 1/20 grain.

Potent cough sedative - dose, 1/128 grain to 1/64 grain.

Readily soluble, quick acting.

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MARCH 13-16, 1950

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Dr. Willis E. Brown, Little Rock, Ark.	Obstetrics-Gynecology
Dr. Jerome W. Conn, Ann Arbor, Mich.	Medicine
Dr. George Crile, Jr., Cleveland, O.	Surgery
Dr. Harry Eagle, Bethesda, Md.	Research Medicine
Dr. R. H. Flocks, Iowa City, Ia.	Urology
Dr. Ralph K. Ghormley, Rochester, Minn.	Orthopaedics
Dr. Frank Glenn, New York City	Surgery
Dr. H. Dabney Kerr, Iowa City, Ia.	Radiology
Dr. John M. McLean, New York City	Ophthalmology
Dr. Mitchell I. Rubin, Buffalo, N. Y.	Pediatrics
Dr. Robert E. Votaw, St. Louis, Mo.	Otolaryngology

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 Dr. Perry C. Talkington }
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 Dr. Howard M. Burkett, Associate Psychiatrist

Miss Marguerite Harmonson, Director of Nurses
 Henry J. Albach, Hospital Administrator
 Miss Patsy Crowe, Director Occupational Therapy

OFFICERS OF COUNTY SOCIETIES, 1950*

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	Jack F. Parsons, Cherokee	John X. Blender, Cherokee	Last Tues. each Second Month
Atoka Bryan-Coad- Johnston.....	B. B. Coker, Durant	Roger W. Witt, Durant	
Beckham.....	H. K. Speed, Sayre	V. R. Payne, Cheyenne	Second Tuesday Third Thursday
Blaine.....			Third Thursday
Caddo.....			Subject to Call
Canadian.....	Joseph H. Goldberger, El Reno	Jack W. Myers, El Reno	Second Tuesday
Carter.....	Pat Lawson, Marietta	Ethel M. Walker, Ardmore	First Tuesday
Cherokee.....			
Choctaw-McCurtain- Pushmataha.....	Floyd L. Waters, Hugo	H. D. Wolfe, Hugo	
Cleveland.....	James F. Hohl, Norman	James O. Hood, Norman	Fourth Thursday
Comanche.....	Lawrence W. Ferguson, Lawton	Charles Graybill, Lawton	Second Tuesday
Cotton.....	Willard L. McGraw, Walters	Mollie Seism, Walters	Third Friday
Craig-Ottawa.....	L. P. Hetherington, Miami	J. E. Highland, Miami	
Creek.....	J. F. Curry, Sapulpa	J. M. Bayless, Sapulpa	Second Tuesday
Custer.....	C. B. Cunningham, Clinton	J. B. McGrick, Clinton	Third Thursday
Garfield-Kingfisher.....	Charles J. Roberts, Enid	Rosecoe C. Baker, Enid	Fourth Thursday
Garvin.....	Jesse R. Waltrip, Pauls Valley	John R. Callaway Pauls Valley	Wed. before 3rd Thur.
Grady.....	Aaron Little, Chickasha	B. M. McDougal, Chickasha	Third Thursday
Grant.....			
Greer.....			
Harmon.....			First Wednesday
Haskell.....			
Hughes.....	L. A. S. Johnston, Holdenville	Gene Slagel, Holdenville	Third Tuesday
Jackson.....	Willard D. Holt, Altus	Malcolm Mollison, Altus	Last Monday
Jefferson.....			Second Monday
Kay-Noble.....	J. W. Francis, Perry	N. H. Cooper, Ponca City	Second Thursday
Kiowa-Washita.....			
LeFlore.....			
Lincoln.....			First Wednesday
Logan.....			Third Tuesday
McClain.....			
McIntosh.....			Third Thursday
Muskogee-Sequoyah Wagoner.....	Carson L. Oglesbee, Muskogee	Virgil D. Mathews, Muskogee	First Tuesday
Northwestern.....	E. A. McGrew, Beaver	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	M. L. Whitney, Okemah		
Oklahoma.....	John F. Kuhn, Oklahoma City	Ralph Smith, Oklahoma City Mrs. Muriel Waller, Exec. Secty.	Fourth Tuesday
Oklmulgee.....			Second Monday
Osage.....			Third Thursday
Payne-Pawnee.....			Third Friday
Pittsburg.....	William P. Lerblance, Jr., Hartshorne	H. C. Wheeler, McAlester	Third Friday
Pontotoc-Murray.....			1st and 3rd Wed.
Pottawatomie.....	C. C. Young, Shawnee	Clinton Gallaher, Shawnee	Third Wednesday
Rogers-Mayes.....	Paul B. Cameron, Pryor	P. S. Anderson, Claremore	
Seminole.....			Third Wednesday
Stephens.....			Third Wed.
Texas.....			
Tillman.....			Second and Fourth Monday
Tulsa.....	Fred E. Woodson, Tulsa	John G. Matt, Tulsa Mr. Jack Spears, Exec. Secty.	
Washington-Nowata..			
Woods.....	D. B. Ensor, Hapetou	W. F. LaFon, Alva	2nd Wed. Odd Months

*Secretaries of the counties left blank in the above listing are asked to send in a list of their officers to the Executive Office, 210 Plaza Court, Oklahoma City, as soon as possible so that all counties may be included in the next issue.

STATE BOARD OF HEALTH

Grady F. Mathews, M.D., Oklahoma City.

(Number after name indicates years to be served.)

Arnold Schwallsch, Engineer, El Reno (9); M. L. Whitney, M.D., Okemah (8); C. R. Rountree, M.D., Oklahoma City (7); Bert Loy, Hospital Administrator, Oklahoma City (5); A. G. Reed, D.O., Tulsa (4); Charles Ed White, M.D., Muskogee (3); Otto Whiteneck, D.D.S., Enid (2); T. H. McCarley, M.D., McAlester (9); Roy L. Fisher, M.D., Frederick (4).

STATE BOARD OF MEDICAL EXAMINERS

H. C. Weber, M.D., Bartlesville, President; Clinton Gallaher, M.D., Shawnee, Secretary; R. B. Gibson, M.D., Ponca City; Hugh H. Monroe, M.D., Pauls Valley; Everett G. King, M.D., Duncan; O. C. Newman, M.D., Shattuck; and John C. Perry, M.D., Tulsa.

COMMITTEE ON STANDARDIZATION

(As approved by the Crippled Children Act)
Earl D. McBride, M.D., Chairman, 605 N. W. 10th St., Oklahoma City.

I. F. Stephenson, M.D., Alva, Vice-Chairman.
Joe N. Hamilton, Secretary, 805 Midwest Bldg., Oklahoma City.

J. F. Park, M.D., McAlester; Floyd Newman, M.D., Shattuck; E. Eugene Rice, M.D., Shawnee, and M. M. Williams, D.D.S., Chickasha.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

OF CURRENT INTEREST

In January, 1950, the first number of *American Practitioner and Digest of Treatment* appeared. This attractive publication published by J. B. Lippincott represents the amalgamation of the *American Practitioner* and *Digest of Treatment*, formerly published by this company.

It is gratifying to find that the first scientific article in Vol. 1, No. 1, is by our own Dr. Bert F. Keltz. He discusses diabetes, one of the most important chronic diseases now before the medical profession.

JOURNAL EDITOR HONORED*

The unusual critical and literary ability of the Editor of the Journal, Dr. Lewis J. Moorman, as well as his interest in and knowledge of tuberculosis, has been recognized by the National Association for the Prevention of Tuberculosis of Great Britain. This organization has for the past five years published the Tuberculosis Index which is a bibliography of everything published about tuberculosis including abstracts of the current literature. Dr. Moorman has been asked to serve on the Editorial Board. A letter from the Secretary-General contains a sentence which describes the proposed relationship far better than can I.

"We should like very much to add to our Editorial Board the name of a distinguished American physician who would guide us in the handling of American papers and would constitute a link between us and your country."

His colleagues in Oklahoma know that he is well fitted for this task, but what is still better, Dr. Moorman has been uncompromising in his position of opposing compulsory health insurance and we can stand such a "link" between us and their country.—B.H.N.

THE COUNCIL MEETING

On December 18 while the great majority of the members of the State Medical Association were prescribing pills or pursuing pleasure, the members of the Council were struggling with the Association's routine business including some very grave problems. The latter coming out of crazy situations which have resulted from the socio-economic quirks of a welfare-state psychology which has a cockeyed world rocking dangerously on the shoulders of a distraught atlas.

The deliberate analytical approach to all problems, and the sincerity, patience, poise, tolerance and judgment employed command the respect and gratitude of every member of the State Association.

Such deliberations not only assure wise administration for the State Association but they put our Association in line for national recognition. Already the splendid reports of our delegates to the A.M.A. reflect our influence in national affairs.

Our hats are off to the officers of the Oklahoma State Medical Association and its faithful workers including all members of the staff at 210 Plaza Court.

While our Councilors and workers may not be world famous "Ancients of the College", they dispense

"... God's own Common Sense
Which is more than knowledge!"

CONGRATULATIONS NEW ENGLAND JOURNAL OF MEDICINE

In the January 5 issues of the Journal under the department of "Medical Progress," there is a discussion of toxicology by Joseph T. Walker who calls attention to the fact that the "Medical Progress" reports were "first instituted in the *Boston Medical and Surgical Journal*, the forerunner of the *New England Journal* exactly 75 years ago and that the first report was on toxicology. This is an enviable record — a tradition of which

*Publication of the above editorial is by request of the Editorial Board and without the knowledge or approval of the Editor.

the Journal may well be proud.

The author discusses the historical background of his subject detailing its growing importance with the march of progress, explains its application under modern conditions and calls attention to advances in analytic methods.

This is a good example of medicine's evolutionary processes when it is permitted to work out its own destiny.

PREMATURE PUBLICITY

The over optimistic newspaper publicity about antihistaminic preparations for the common cold is most unfortunate for the public. Since medical science has not yet discovered the cause of colds, it is remarkable that manufacturers and distributors should have the courage to go over their puzzled heads with glowing claims promising prevention and cure with drugs the family physician has been using for several years with a full knowledge of their dangers and limitations under an obligation imposed by knowledge of the drug's action to personalize prescribing.

The present craze about the new cold remedy is another good example of how even well guarded reporting on things medical finds its way into the lay press and may lead ambitious purveyors of therapeutic agents to overshoot the mark.

In the January 14, 1950, British Medical Journal there is a report of two deaths from antihistaminics in Great Britain and two in France. While these deaths are in children who died from accidental overdoses, the death reports emphasize the poisonous potentiality of these preparations and are not in keeping with the December, '49 Readers Digest assurance of "the complete safety of these drugs". Neither does the relief afforded by the administration of the drugs support the bouyant "step ahead in the comfort of mankind". On the whole the glaring December publicity constitutes a questionable Christmas present to a gullible public for which an ambitious Santa Claus may some day meet a guilty conscience face to face.

It is to be feared that like the Treasure Island pirates they had their eyes on the golden quid rather than the Coryza Kid. Money may not be the root of all evil but it foists upon the public the poisonous products of many a would be Midas.

Antihistaminics should be dispensed only upon a physician's prescription and not upon

an ambitious manufacturer's pharmaceutical presumption.

THE HEALTH OF THE NATION

This morning the writer ran across the following notes penciled on prescription blanks approximately 12 years ago. They were inspired by Esther Everett Lape's article in a popular magazine, as she thought, making it obvious to the people that "State Medicine" must come quickly in order to save the Nation. Thanks to free enterprise and the "crutch of time" we have hobbled along and helped the nation to attain a higher level of health than Esther could imagine. She made light of the fact that high-school children throughout the country had been debating State Medicine "as if it were still a question to be answered". It is to be hoped that she has lived to see that her cocksure opinion that regimented medicine must come quickly was not the answer.

About this time J. Hamilton Lewis put "Roosevelt's plan up to convention delegates" — meaning A.M.A. House of Delegates at Atlantic City. As the President's message bearer he said, "I beseech you to pause and realize there is nothing whatever that the mind can conceive, that is not now undergoing some form of encroachment. Doctors, the question for you is not whether you like, or whether you don't . . . it would be absurd to resist." The President and his prophet, if not utterly wrong, were at least premature.

It proved to be wild "gobbledegook" which followed them to their graves and left them with cleaner hands than they would have had if their plan had succeeded.

Let us hope the same may be said of the present corresponding pair plugging for control of the people's medicine and their physicians.

At a strategic moment in politics Oscar W. Ewing employed the pages of a popular magazine for propaganda similar to that championed by Esther Lape with a more personal objective but it is safe to believe that in 12 years from now both he and his cause will be lost in oblivion.

It is not encouraging that, in spite of the fact that the Social Security Act originally considered compulsory health insurance as one of its coveted prizes, medicine has pursued its independent way in the service of an increasingly dependent people. They have less liberty but they live longer because medicine is still free.

WHEN REWARD IS MUTUAL

Considering the present agitation concerning various proposals for medical care including the threat of compulsion it may be well to re-appraise the vaunted patient-physician relationship. Already there is evidence that it has suffered a severe strain and that physicians are largely to blame. Too often at social gatherings during the cocktail hour or across the dinner table the sad truth comes out even where medical ears are focused upon the talk. It's unfortunate that such unsavory faggots must be added to the fire of social converse. There must be good reason for this modern tendency to criticize the doctor. It is time all physicians should search their hearts.

Patients should stand as the physician's living testimonials. The following from a grateful patient to her physician of approximately two decades past is representative of the ideal spirit of mutual service made possible through the old time patient-physician relationship.

"It is a Doctor's duty to give of his best professional skill — but when a Doctor heals the soul as well as the body and gives to his patient a loved and trusted friend as well, then that patient has gained far more than she lost in her illness."

Here is hope for the Grievance Committee — but not without a crusade for a return to the humanities in medicine.

A 10 BILLION DOLLAR QUESTION

According to current reports, Oscar R. Ewing now admits a probable cost of four and one-half billion dollars for his proposed Compulsory Health Insurance program. If his purposes were to be fully achieved and if bureaucrats were sensitive to costs, soon he would have a 10 billion dollar headache. He has not admitted the obvious connection between the F.B.I. investigation of state and county medical associations and his plans for nationalization of medicine. Be it far from any spokesman of organized medicine to embarrass such a militant health ambassador even though he is utterly without portfolio.

But what goes on here warrants a statement with reference to organized medicine in Oklahoma. Truly its origin, purposes and performance fall in the field of public weal and through the members of the medical profession the people should be informed with reference to the government's plan to foist upon them a costly nationalized medical service which will be relatively cold and im-

personal.

The Oklahoma State Medical Association was organized many years ago. The organization was effected by busy physicians who could have pursued their personal interests and the welfare of their patients without the aid of organized effort. But they realized that medicine has a mission to perform; an obligation to the people as well as to the private patient; they could not do their full duty without considering public health as well as private health. They were wise enough to know that they could not adequately meet these broad obligations without high professional standards and that they could not make sure of such standards without organization.

So the State Medical Association was organized for the establishment, maintenance, integration and application of humanitarian ideals and purposes. Out of this organization has come many committees, boards and conferences all striving for better health, increased physical competency and greater happiness for the people of Oklahoma. This great voluntary movement in the field of medicine has spent much time and money in an effort to give the people of Oklahoma the best possible private and public health service and indirectly to give to the Union a vigorous young state physically fit.

As a reward for all this, the federal government through the Department of Justice without the ethics of notice or warning, ordered the F.B.I. to investigate the State Association activities. A great cause has been rebuffed and hampered; a coterie of loyal workers have been surprised and hurt just when they thought the State Association was approaching a crowning success in its voluntary career as a welfare agency.

But in our innocence there is hope that the Department may find so little evidence of conflict with the antitrust laws that we may never be brought to trial. Regardless of what happens it is difficult to see how this move can help the cause of Compulsory Health Insurance.

O.S.M.A. ANNUAL MEETING DATES CHANGED

TO

JUNE 5 - 6 - 7, 1950

HOUSE OF DELEGATES JUNE 4

SCIENTIFIC ARTICLES

HEART DISEASE*

*A Study of the Etiology and the Causes of
Death of Patients with Heart Disease at
University Hospitals Over a Ten-Year
Period (1936-1946)*

W. T. MCCOLLUM, M.D.

OKLAHOMA CITY, OKLAHOMA

This study of heart disease at University Hospitals was interesting because of our desire to know which types of heart disease were common to this locality.

There were 267 deaths, directly due to heart disease, at University Hospitals over the 10 year period from July 1, 1936 to June 30, 1946. (Table I.) Fifteen hundred and eighty-three autopsies were reviewed. During this time there were 64,952 admissions, 59,187 whites and 5,765 colored, and 3,696 deaths, 3,182 whites and 514 colored, or a mortality rate of 53.76 1000 whites and 89.15 1000 colored. The 1,583 autopsies were composed of 1,327 whites and 256 colored. These autopsies represented 41.81 per cent of the total deaths. The ratio of white to colored admissions was 10.26:1; the ratio of white to colored deaths was 6.19:1; the ratio of white to colored autopsies was 5.18:1; and the ratio of white to colored cardiac deaths was 4.6:1 (219 white and 48 colored.) Heart disease then represented the direct cause of death in 16.5 per cent of the white patients and 18.7 per cent of the colored patients who came to autopsy at these hospitals for this 10 year period. There were other patients in which heart disease was a definite contributing factor in the cause of death, but these were not included. For example, a patient with "congestive heart failure" requiring surgical intervention for another cause, but in spite of the usual care and treatment, the patient expired following this procedure.

The etiological classifications of the two hundred and sixty-seven cases who died from heart disease was studied. (Table II.)

HYPERTENSIVE HEART DISEASE

This group comprised the largest number of patients, 100 of the total, or 37.5 per

cent. The age, race, and sex distribution was studied and the causes of death were tabulated. (Table III. a, b, c). One case was a dissecting aneurysm and another a ruptured aorta (a small slit with hemorrhage into the pericardial cavity). In the remainder, the exact cause could not be ascertained. Some authors have referred to this as "visceral failure". In the "malignant group"—

6 died from uremia

2 from "congestive heart failure"

1 from a ruptured "slit" in the aorta

2 from cerebrovascular accidents

One of these latter had repeated cerebrovascular accidents.

Pathology: As the pathology in this group was of the usual findings, details need not be involved. The average weight of 92 hearts, in which the weight was given, was 577 G., with a minimum of 275 Gm. and a maximum of 1040 Gm. The average weight of the hearts in the patients falling in the "malignant group" was 612 Gm.

ARTERIOSCLEROTIC CORONARY HEART DISEASE

This group included the second largest number of patients, with 74 falling into this category, or 27.7 per cent of the total group. The age, sex, and race distribution was studied and the causes of death listed. (Table IV. a, b, c). The youngest patient, 39 years of age, died from myocardial infarction, and the oldest, 95 years of age, died from rupture of dissecting aneurysm into the peritoneal cavity.

Pathology: Twenty-eight died from acute myocardial infarction and 30 died because of chronic "congestive heart failure". Of the acute myocardial infarctions, 15 involved the left anterior descending branch, one the left coronary proximal to the bifurcation, four the right circumflex branch, one the left circumflex branch, and in seven cases

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1949

the available data was not adequate for localization.

Of the 64 heart weights recorded, the average was 447 Gm. with a minimum of 220 Gm. and a maximum of 825 Gm. This latter case was complicated by marked coronary sclerosis, hyperplasia of the prostate, suppurative cystitis and pyelonephritis, and secondary hypertension. The cause of death was coronary thrombosis with myocardial infarction.

No doubt, complications that were factors in the somewhat higher average heart weight were, four cases of severe calcific aortic valvulitis, seven cases with old healed myocardial infarctions, and four cases with varying degrees of pyelonephritis and secondary hypertension.

There were actually nine cases of pulmonary embolism. However, three of these were from mural thrombi associated with myocardial infarction, and five were due to phlebothrombosis of leg veins in patients with "congestive heart failure". In the remaining patient the site was not determined but probably originated in the leg or pelvic veins.

RHEUMATIC HEART DISEASE

This group included all patients of rheumatic heart disease, such as those dying from "congestive heart failure," bacterial endocarditis, etc. This group constituted 17.2 per cent of the cases studied in this series. Age, sex, and race tabulations were made. Causes of death were listed. (Table V. a, b, c). The youngest patient was two and one-half years of age and the oldest was 59 years of age.

Pathology: There were 16 cases of chronic, inactive rheumatic heart disease and seven cases of chronic rheumatic heart disease that died during acute exacerbation. Subacute bacterial endocarditis. Four deaths were due to the active phase of pancarditis. Six patients were of undetermined activity or inactivity, but would probably fall in the chronic inactive group.

In regard to the involvement of the valves of the cases of chronic, inactive rheumatic heart disease, there were:

- 10 cases in which the mitral valve alone was involved
- 9 cases with mitral and aortic involvement
- 2 cases with mitral, aortic and tricuspid involvement
- 1 case with mitral, aortic, tricuspid and pulmonic involvement

1 case with mitral and tricuspid involvement

It was interesting to note that of the eight deaths due to subacute bacterial endocarditis, two were in the acute rheumatic phase and the vegetations involved MacCallum's patch, as well as the valves. It was not clearly stated what valvular involvement was present in six cases.

From the above group of 23 patients, there were 10 (43.6 per cent) in which the mitral valve was the only valve involved. The remaining 13 had multiple valvular involvement.

The average weight of 30 hearts was 552 Gm., with the maximum being 1175 Gm., due to severe aortic regurgitation. The pulmonary emboli were in patients with auricular fibrillation and mural thrombi in the right atrium. There were six cases of pulmonary embolism apparently due to "congestive heart failure." Phlebothrombosis was not diagnosed as a complication of the heart failure. In the two cases of cerebral embolism the diagnosis was made clinically. The brain was not examined postmortem.

CONGENITAL HEART DISEASE

There were 15 patients with congenital heart disease ranging from one day to 15 years of age; 12 were white and three were colored (nine white males, three white females, and three colored males). There were no colored females. There was little of note here other than the variety of congenital abnormalities and that one case may fall into the category of von Gierke's Disease. The majority were patent ductus arteriosus, coarctation of the aorta and interventricular septal defect with or without associated lesions, usually patent ductus arteriosus. There was one patient with Tetralogy of Fallot.

LUETIC HEART DISEASE

Lutetic heart disease was diagnosed in 11 patients: three were 30-39 years of age, three were 40-49 years of age, three were 50-59 years of age, and two were 60-69 years of age. There were seven white males, two white females, and two colored females. There were no colored males, which was very unusual.

Pathology: All of these cases exhibited the characteristic aortitis. There were three sacular and three fusiform aneurysms. Complete occlusion of both coronary ostia was present in one patient and in two others there were old myocardial infarctions.

Of 11 patients, the heart weight was recorded in eight cases, the average weight being 696 Gm. with a minimum of 400 Gm. and a maximum of 1175 Gm., a case of severe aortic regurgitation.

Causes of Death: Eight died from "congestive heart failure"; one from pulmonary embolism; one from a self-inflicted gunshot wound of the head (this patient made the statement that due to his prolonged illness from heart disease and the inability to be treated adequately, he would, and did commit suicide), and the remaining patient died from surgical rupture of an aneurysm.

PERICARDITIS

There was one case of calcified pericarditis in a 34 year old white male and another of fibrous, constrictive pericarditis in a 30 year old colored male. Both were due to tuberculosis and both caused death from chronic cardiac tamponade.

CHRONIC COR PULMONALE

There were six patients in this group ranging from 14 months to 55 years of age. Two were white females, three were white males, and one was a colored male. These were all due to chronic asthma with or without extensive bronchiectasis, tuberculosis or lung abscesses.

"PRIMARY" AYERZA'S DISEASE

There were three patients with "primary" Ayerza's Disease, all in the white race, two white females and one white male, ranging from 40 to 51 years of age. In two of these, there was, in addition, an essential hypertension, though the patients died from unproportioned "right heart failure" with cyanosis, severe unproportional dyspnea, etc., the hearts being of the pulmonary configuration, exhibiting marked hypertrophy of the right ventricle.

THYROTOXIC HEART DISEASE

Two patients died of thyrotoxic heart disease. One was a 31 year old colored male, and the other a 60 year old white female. From reviewing the records of these patients, there can be little doubt that this

was the cause of death. The female was in auricular fibrillation and died from an embolus from a mural thrombus in the left atria that occluded the popliteal artery with gangrene; the other from cerebrovascular accident, the result of embolism. This colored male could not be controlled. He was in severe "failure", he would not stay in bed, signed out of the hospital, etc., and returned from a second such escapade with a cerebrovascular accident.

POST-DIPHTHERITIC HEART DISEASE

There was one case of post-diphtheritic myocardial "failure" in a six-year old white female who was hospitalized in Arkansas and was taken out of the hospital against medical advice and moved to Oklahoma City. In the interval the "failure" developed and remained progressive until death. There was an interval of several weeks between hospitalization in Arkansas and at University Hospitals. This patient received inadequate treatment.

AIR EMBOLISM

There was one death in a 13 year old white male with a fractured humerus and lacerated veins. The right side of the heart and pulmonary arteries were found distended with air from aspiration of the air from the lacerated veins.

UNDETERMINED

There were six cases in which the available data was not sufficient to determine the etiology. There were two white males, two white females, and two colored females. In each instance, the death occurred in patients with chronic "congestive heart failure". These were interesting cases for speculation. Such physiological accidents as ventricular fibrillation, asystole, and other arrhythmias of transient nature surely were instrumental in some of the deaths. Not infrequently, patients have been seen who were doing well but who die suddenly. Post mortem examination frequently does not help in determining the exact mechanism of these deaths.

	TOTAL	WHITE	COLOR	RATIO (WHITE:COLOR)
ADMISSIONS	64,752	59,187	5,765	10.26:1
DEATHS	3,696	3,182	514	6.21:1
MORTALITY RATE	56.9	53.76	89.15	1:1.66
AUTOPSIES	1,583	1,327	256	5.18:1
CARDIAC DEATHS	267	219	48	4.6:1
PER CENT OF DEATHS DUE TO CARDIAC DISEASE	26.8	26.5	16.7	1:1.1

TABLE I. UNIVERSITY HOSPITAL STATISTICS

100 cases of hypertensive heart disease	37.5 %
74 cases of arteriosclerotic coronary heart disease	27.7 %
46 cases of rheumatic heart disease	17.2 %
15 cases of congenital heart disease	5.6 %
11 cases of toxic heart disease	4.1 %
6 cases of cor pulmonale due to chronic lung disease	
3 cases of "primary" Ayerza's Disease	
2 cases of pericarditis	
2 cases of thyrotoxic heart disease	7.9 % of the series
1 case of post-diphtheritic myocardial failure	
1 case of air embolism in the heart and pulmonary arteries	
6 cases of undetermined etiology	

TABLE II. ETIOLOGIC CLASSIFICATION OF 267 CARDIAC DEATHS

RACE AND SEX		AGE (1946-1949)	
WHITE	COLOR	20-29	30-39
171 (64)	95 (34)	30-39	14 (54)
15 (54)	19 (74)	40-49	20 (74)
10 (37)	10 (37)	50-59	1 (37)
60-69	36 (74)	70-79	12 (46)
TOTAL	100 (100)		

(a) 1946-1949 (b) 1950-1951

CAUSES OF DEATH	
"Congestive Heart Failure"	40
Myocardial Infarction	19
Coronary Arteriosclerosis	10
Stroke (Cerebral Failure)	17
Embolism	6

(c) 1946-1949 (d) 1950-1951

TABLE III. (a, b, c, d) ETIOLOGY OF DEATH

RACE AND SEX		AGE DISTRIBUTION IN YEARS	
WHITE	COLOR		
TOTAL	16	5	
MALE	20	3	
FEMALE	21	2	
TOTAL	46		

CAUSES OF DEATH	
"Congestive Heart Failure"	29
Subacute Bacterial Endocarditis	8
Acute Bacterial Endocarditis	5
Pulmonary Embolism	2
Cerebral Embolism	2

(a)

RACE AND SEX		AGE DISTRIBUTION IN YEARS	
WHITE	COLOR		
TOTAL	70	4	
MALE	61	2	
FEMALE	9	2	
TOTAL	70		

CAUSES OF DEATH	
"Congestive Heart Failure"	33
Myocardial Infarction	28
Coronary Arteriosclerosis	6
Uremia	3
Acute Bacterial Endocarditis	2
Dissecting Aneurysm	1
Rupture of Aneurysm	1

(b)

	Hypertensive	Arteriosclerotic	Total
Left Anterior Descending Branch	10	15	25
Right Circumflex Branch	1	4	5
Left Circumflex Branch	0	1	1
Left, Proximal to Bifurcation	1	1	2
Left Marginal and Anterior Descending Branches	1	0	1
Left Anterior Descending and Terminal Portion of Right Circumflex	1	0	1
Undetermined at Autopsy	5	7	12
	19	28	47

TABLE VI. SITES OF THROMBOSIS OF THE CORONARY ARTERIES WITH MYOCARDIAL INFARCTION

NEOPLASMS

Primary neoplasms of the heart were not found in this series. There were 11 patients in which the heart, pericardium, or both were involved by metastasis or invasion. One of particular note was a patient with multiple malignancies ("generalized" adenocarcinoma of the gastro-intestinal tract) that involved the heart and pericardium by metastasis.

MYOCARDIAL INFARCTION

Myocardial infarction deserved special consideration since there were 47 cases in this group; 28 non-hypertensive and 19 hypertensive. The sites of involvement of the coronary arteries by thrombosis were studied. (Table VI.) Saphir, et al¹ found both coronary arteries involved by "coronary sclerosis" but the most severe lesions were found in the anterior descending branch.

The race and sex distribution was of interest. (Table VII.) The ratio of males to females was 40:7 (5.7:1). There were seven females who died from myocardial infarction; five in the hypertensive group and two were non-hypertensive. This agreed with Bland and White² who reported that 85 per cent of the myocardial infarctions occurred in men. Myocardial infarction was the cause of death in six colored patients (five males and one female) or 12.7 per cent of the group. Five were in the hypertensive group and two were in the arteriosclerotic group.

DISCUSSION

This series was compared with that of

Clawson³. (Table VIII.) There was a significant difference in this series and in that of Clawson's³ in the hypertensive and arteriosclerotic groups. This might be explained in part on the difficulty in recognizing hypertensive changes postmortem. Arteriolo-nephrosclerosis need not be present post-mortem. Patients with hypertension who develop "congestive heart failure" frequently have a lowering of the blood pressure. When objective pathologic changes of hypertension were not present and the blood pressure was recorded as normal, these patients were placed in the arteriosclerotic coronary group, particularly when cardiac hypertrophy seemed explainable on the basis of aortic valvulitis, etc. When these two groups were added together, the two series were quite comparable. Hypertension, secondary to primary renal disease, ie, chronic glomerulonephritis, was not included in this report.

In the hypertensive group, there was little of note since the age distribution and the various causes of death were in keeping with those reported by other authors.^{4 5} There was a greater incidence of colored patients who died of hypertensive heart disease. The incidence of the "malignant phase" of hypertension was two times greater in the colored as compared with white patients.

The causes of death in arteriosclerotic coronary heart disease in this series were not in keeping with those reported by White⁴ or Clawson³. Factors which increased

	CLAWSON	THIS SERIES
HYPERTENSION	55.5)	37.5)
ARTERIOSCLEROTIC	6.2)	27.7)
RHEUMATIC	18.6	17.2
BACTERIAL ENDOCARDITIS	11.0	*
LUETIC	7.0	4.1
CONGENITAL		5.6
MISCELLANEOUS	1.8	7.9

* included in Rheumatic (except 2 cases in Arteriosclerotic)

TABLE VIII.

RACE AND SEX			
	HYPERTENSIVE		ARTERIOSCLEROTIC
	WHITE	COLOR	WHITE
TOTAL	15	4	26
MALE	11	3	24
FEMALE	4	1	2
TOTAL	19		28
GRAND TOTAL			47

TABLE VII. MYOCARDIAL INFARCTION

the "congestive heart failure" group as a cause of death may have been calcific aortic valvulitis, old healed myocardial infarctions, and pyelonephritis with secondary hypertension. Bartels and Smith⁶ found that myocardial infarction increased the heart weight 132 Gms. White¹ agreed with their findings. It was interesting to note that acute bacterial endocarditis was a cause of death in two of the patients with the arteriosclerotic coronary heart disease.

In the group with rheumatic heart disease, two-thirds of the patients died as a result of "congestive heart failure" and slightly less than one-third from acute or subacute bacterial endocarditis. White and Jones⁷ found rheumatic heart disease accounted for 29.5 per cent of the total series in their clinical study. In those reported by Clawson³, he found an incidence of 29.6 per cent when all cases of bacterial endocarditis were added to the rheumatic group. The underlying etiology of most of these cases would have been rheumatic.

Congenital heart disease was not presented in detail in this paper. However, these cases represented patients dying as the result of congenital malformations of the heart and did not include cardiac anomalies that were compatible with life and who died from other causes. As mentioned previously luetic heart disease was not considered significant in this series. The miscellaneous group was too small to be of any statistical significance but was included for completeness. It was extremely interesting that two

of the three cases of "primary" Ayerza's Disease were also complicated by significant systemic essential hypertension.

SUMMARY

1. During this 10 year period 267 deaths at University Hospitals were directly due to heart disease.

2. Two hundred and nineteen of the patients were white and 48 were colored.

3. Heart disease accounted for 16.8 per cent of all deaths occurring at University Hospitals.

4. Hypertensive and arteriosclerotic coronary heart disease caused 65.2 per cent of all deaths from heart disease.

5. Rheumatic heart disease, as a cause of death, was somewhat less common at University Hospitals than in other reported series.

6. Myocardial infarction caused death in 47 patients; 41 white and six colored patients.

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"HYGEIA" NAME CHANGED

With the March, 1950 issue "Hygeia", the health magazine of the A.M.A. written for the layman, will become known as "Today's Health". The name was changed, the A.M.A. announces, to be more descriptive of the

aims and contents of the magazine. W. W. Bauer, M.D., Director of the A.M.A. Bureau of Health Education, is editor of the magazine, succeeding Morris Fishbein, M.D.

PLAN TO ATTEND

Your O.S.M.A. Annual Meeting

June 5-7

Municipal Auditorium, Oklahoma City

TREATMENT OF CONGESTIVE HEART FAILURE*

J. B. MOREY, M.D.

ADA, OKLAHOMA

Starr¹ defines congestive heart failure as a physiologic process gone wrong. The venous pressure is raised and the veins stand out and become tense. The pathologic physiology of congestive heart failure has been the cause of much speculation and clinical and laboratory study. It is important to know what happens and why in order for us to treat congestive heart failure intelligently.

The chief controversy at present is whether there is backward failure or forward failure. Backward failure is considered more important by some in the production of congestive failure. In backward failure the veins are distended by blood being dammed back by a weakened heart which is unable to empty itself with each systole. Edema, effusions, and ascites are said to be produced by an increase in hydrostatic pressure in the venules and capillaries.

Forward failure is due to a decrease in the amount of blood the heart is able to force forward into the systemic circulation. This reduction in blood flow decreases the plasma flow to the kidneys and causes a marked reduction in the glomerular filtration rate of the kidneys. The result is a retention of sodium in the body which in turn leads to a retention of body fluids and an increase in blood volume. This series of events produces an increase in the venous pressure which helps increase the edema.

Stead² believes that both backward and forward failure are present. He has shown that cardiac output which is normally between 2.3 liters and 4.1 liters per square m of body surface, in the majority of cases decreases. This is especially true if the output is measured with the patient doing some exercise and not at bed rest. Many injured hearts will have a normal output when at rest but show a decided decrease

from normal on exercise. Some injured hearts continue to have a normal output and some in congestive failure will have an increase in cardiac output.

Starr suggests the train of events leading to congestive failure as follows: 1. Heart disease; 2. Diminished circulation to: a. Kidney, b. Bone marrow, c. Other organs; 3. Retention of sodium and water; 4. Increase blood volume; 5. Venous congestion; 6. Stimulation of heart from increased venous pressure; 7. Further heart damage.

Merrill³ suggests that in advanced failure with exaggerated sodium retention the cause may be due to stimulation of the adrenals and possibly the presence of an anti-diuretic factor from the pars intermedia of the pituitary.

It is of interest that symptoms of congestive failure sometimes result in cases without heart disease. On the other hand we frequently see severe heart disease, such as coronary occlusion with decreased cardiac output and no congestive failure and marked venous pressure as seen after ligation of the vena cava or in cases of adhesive pericarditis often do not show edema.

Keeping this discussion of the mechanism of congestive failure in mind how best are these cases treated. Gold⁴ at the San Francisco meeting of the American College of Physicians and again more recently in the Volume III of the Cornell Conferences on Therapy emphasized six important steps in the management of cases of congestive failure, rest, low sodium intake, adequate fluids, digitalization, mercurial diuretics, and daily weights. We have followed his recommendations for the past year and have found it the most satisfactory method to date in our hands. It is not necessary to wait for the patients to become so badly decompensated that they have to be hospitalized to start them on the program.

The rest prescribed for the patients may be either in bed or if more comfortable

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1949.

sitting in a chair and is continued until they become compensated. They are then instructed to try to keep their physical exertion and mental worry short of the point of becoming short of breath or fatigued. Daily rest periods may be continued as indicated.

A low sodium diet should contain from 1.0 to 1.5 grams in 24 hours. One to one and a half quarts of milk every 24 hours for 1-2 weeks as indicated is the easiest and most reliable method in the hospital or home to insure a low salt intake. As the patient improves a more liberal diet may be allowed. This diet should contain no added sodium chloride. As compensation improves salt may be added providing weight can be maintained as will be discussed in a moment. Do not give medicines containing sodium, such as sodium salicylate or sodium bicarbonate when trying to rid patients of edema. One word of caution should be inserted. A few patients may lose sodium through their kidneys faster than the average. If symptoms of too great sodium loss arise, vigorous action should be instituted to correct this loss.

Gold recommends two liters of water every 24 hours as adequate fluid. This amount can easily be handled by the kidneys and insures enough fluid to carry off the end products of metabolism that the body rids itself of through the kidneys.

We have used the digitoxin preparation digitaline nativele for the past three years and have found it highly satisfactory. We have followed Gold's recommended dose of 1.2 mg given at one dose and then a maintenance dose of .2 mg digitaline nativele daily. The digitalizing and maintenance doses will work in the majority of cases. A few will require more and a few will develop signs and symptoms of digitalis intoxication from this size dose. The signs and symptoms are the same as result from intoxication by any of the digitalis preparations but come on more rapidly because digitoxin is 100 per cent absorbed by the intestinal mucosa and will produce its effect two to four hours after ingestion. The maintenance dose can be regulated as we follow the patient.

Just as important as low salt and digitalis is the use of the mercurial diuretics and weighing the patient at the beginning of the treatment and daily. Gold's recommended dose of one-half cc to 1 cc of mercurhydrin intramuscularly once a day has been followed. Mercurhydrin and salyrgan may be given intravenously but the intra-

muscular route is probably the safer. It is usually possible to get a loss of two to three lbs. daily by giving the diuretic in small doses each day. Small doses are not as dangerous and a moderate diuresis does not make the patient weak. The daily weight is very important in order to follow the patient's course. As long as he loses two to three lbs. daily you know he is improving or will improve. It is much more accurate than keeping track of the patient's fluid output. If weight is not lost on this program, one-half cc to one cc of mercurhydrin may be given twice a day or two cc may be tried.

These injections are kept at daily intervals until the patient's weight levels off. The injections are then spaced out to every other day or even farther apart. The daily weighing should be continued. An attempt should be made to give an injection of the mercurial diuretic the day before there is a gain in weight. For example, if the patient gains two pounds on the fifth day he should receive his injection on the fourth day. This should be done for several weeks and then the patient can try a day or two longer depending on whether or not he picks up two to three pounds in 24 hours when weighed at the same time of day.

If necessary patients or one of their relatives can be taught to give these injections just as they are taught to give insulin. They soon understand they are not supposed to gain weight suddenly and can be impressed with this fact by telling them that a gain of a few lbs. in 24 hrs. usually means their hearts are not working as efficiently as they should.

It is well to know that patients can be dehydrated too much with mercurial diuretics. Too much sodium or too much calcium can be forced out of the body with the resulting symptoms of too little sodium and tetany from losing too much calcium. Patients can develop signs of mercury poisoning but this is extremely rare and happens only when large doses are used without resulting diuresis. Occasionally patients will develop an anaphylactic reaction with chills and fever and generalized aching. A different mercurial preparation should be tried. It is possible to be sensitive to one and not another.

A discussion of the treatment of congestive failure would be incomplete without a word about oxygen and sedation. Both are indicated. Oxygen is especially indicated when there is dyspnea at bed rest, cyanosis

and pulmonary edema. It may be given by oxygen tent, nasal catheter or oxygen mask and continued until the symptoms are relieved. Four to six liters per minute is about the average dose. Sedation should be used to insure mental and physical rest.

CONCLUSION

1. This method of treating congestive failure can be applied just as well to the early case with only dyspnea as to the late case with orthopnea and edema.

2. In following the method recommended

by Gold we have been able to get patients out of bed sooner and have been able to keep them on their feet free from recurring attacks of congestive failure longer.

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THE PREVENTION OF DENTAL CARIES*

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Most of our definite knowledge concerning dental caries has been acquired within the past 15 years. Prior to that time advice and teaching was based upon speculation and theory, some of which has been substantiated.

By definition, dental caries is a destructive, progressive disease, the lesion usually starting in the grooves, inter-proximal and gingival surfaces of the teeth. "It is caused by acids resulting from the action of micro-organisms on carbohydrates and is characterized by a decalcification of the inorganic portion and is accompanied or followed by a disintegration of the organic substance of the tooth."¹

Present preventive methods are based on the following evidence:

1. Sugar is a very important causative factor in caries. Active caries can be induced in children by increasing the sugar intake while they are receiving a diet that is nutritionally adequate. Ingestion of low-sugar diets is conducive, as a rule, to freedom from caries.

2. The most constant differential between caries-free and caries-susceptible persons thus far demonstrated is the relative number of lactobacilli acidophili in the saliva. The correlation of high lactobacilli counts with a high rate of caries activity is ap-

proximately 90 per cent.

3. Dental caries differs quantitatively according to locale. Selective service data generally established inductees from the southwest as having the least caries, those from the north and east, particularly New England, as having the most. This information was of no particular surprise to the dental profession, merely corroborating data from earlier studies on caries-attack rates. Caries-attack rates are based on a total of three items: (1) Decayed permanent teeth; (2) Missing (extracted because of previous caries) permanent teeth; and (3) Filled permanent teeth. This combination has become known as the D. M. F. rate and is the dental caries experience for an individual or a group.

For purposes of comparison, D. M. F. rates are computed on children 12-13-and 14 years of age. There are wide variances in these rates with all gradations between 10 carious teeth per child in South Portland, Maine, and one carious tooth per child in McClain County, Oklahoma.² Oklahoma is geographically fortunate, being in the low caries area. An interesting comparison may be made of D. M. F. rates in Oklahoma and Wisconsin. The average rate for 100 children from the six largest cities in Oklahoma was 261 or approximately two and one-half carious teeth per child. The average rate for 100 children from six Wisconsin cities in-

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cluding Milwaukee was 753 or approximately 7.5 carious teeth per child.³ Why is the caries experience in Wisconsin nearly triple that of Oklahoma?

While no data was secured on milk consumption in Wisconsin, it is recognized as the leading dairy state in the country. We might reasonably assume a per capita consumption of dairy products equal to that in Oklahoma. We no longer, therefore, prescribe milk, excellent food though it is, as a preventive of dental caries. The most plausible explanation of the difference in the rate is an environmental one, climate, soil, water or some combination of the foregoing.

Most of you are aware of the prominent role that fluorine has assumed in controlling dental caries, but a review of developments is valuable as background. The facts came to light about 10 years ago as a secondary result of an investigation as is so often the case. The original study was on the incidence of mottled enamel in four Illinois communities. For the purpose, dental inspections were made of 12-13-14 year old children who had a history of continuous use of their respective communal water supplies. Two of these communities, Galesburg and Quincy, will serve to illustrate our point. The children in Galesburg had mottled enamel and a D. M. F. rate of 2. per child. The children in Quincy had no mottling of enamel and a D. M. F. rate of 6. per child. It will be seen that the dental caries rate was three times as great in Quincy as in Galesburg.

The chief variable with dental implications was the water supply of each of the two cities. Galesburg's water had 1.9 p.p.m. of fluorine; Quincy's water had .2 p.p.m. of fluorine. There were other differences which were essentially unimportant for our purposes.

Fluorine was known to be the cause of the mottled enamel; was it also the inhibitor of caries?

Following this lead, all subsequent investigations have supported this hypothesis. The water supply of Colorado Springs which is melted snow flowing down Pike's Peak over a fluor spar deposit confers relative caries immunity. This water is low in mineralization generally, but contains 2.5 p.p.m. of fluorine. It is also a soft water which would appear to eliminate hardness as a factor in immunity. The pH of most municipal water supplies is adjusted to slightly alkali-

nity before reaching the consumer, thus eliminating this variable. Speaking generally, it is now established that fluorine occurring naturally in concentrations of 1. p.p.m. will approximately halve the caries-attack rate without the undesirable mottling which results from concentrations somewhat higher, such as 2 p.p.m. and over.

There are many unanswered questions in the fluorine hypothesis. How is the immunity conferred, systemically or locally? Can it be produced by the addition of 1 p.p.m. of fluorine to communal water supplies as we now similarly chlorinate these supplies? Is it necessary that an individual use the fluoride water during the greater part of his life or at least during the formative years of dentition? Does an adult with a high caries experience acquire immunity upon moving to a low caries area?

Controlled studies are now being conducted which will in time supply some answers. Fluorine is being added to community water supplies with neighboring communities serving as controls. Of one thing we are certain: natural fluoride-bearing water exercises an inhibitory effect on the organisms which, as was stated earlier, have become the accepted index of caries activity, the lactobacilli acidophili.

This index, i.e. the lactobacilli salivary count, is used not only as a measurement but as a means in the nutritional control of caries.

The nutritional management of caries is based on the idea of reducing the number of acid-producing bacteria by removing their most important food supply (sugar). The restricted carbohydrate diet first developed at the University of Michigan School of Dentistry will control caries when instituted and strictly observed. However, its success is dependent upon the continual vigilance of the patient in restricting his intake of carbohydrates, principally sugars.

This is beset with practical difficulties. The recommended diet is a very restricted one and quite expensive in view of the preponderance of proteins and fats. If followed for an extended period the possibilities of monotony are very real. Another obvious weakness is the American's desire for sweets and his resistance to any change in food habits. However, individuals with rampant caries should be informed of the possibilities for at least partial control through moderation in their consumption of candy, desserts, sweetened soft drinks, etc.

Returning to the role of fluorine as a control agent, its effectiveness when topically applied has been established. Four treatments, the first preceded by a cleansing of the teeth, spaced at one or two a week are the approved technique. This procedure reduces the development of new decay by slightly more than 40 per cent. The immunity has a minimal duration of three years; so the treatments are recommended for children 4, 7, 10, and 13 years of age.

Kesel and others⁴ obtained a marked reduction in oral lactobacilli counts by incorporating dibasic ammonium phosphate and urea in a mouth wash and a dentifrice. Two such dentifrices have been approved by the Council in Dental Therapeutics of the American Dental Association for clinical trial. Clinical investigation of these preparations has not progressed far enough to show whether their use will reduce the incidence of dental caries.

Preliminary reports⁵ published on the studies of the use of penicillin incorporated in a dentifrice indicate inconclusive results and thus present information is not sufficient to warrant the general use of the compound.

Synthetic Vitamin K has anti-acid and anti-bacterial properties and preliminary studies on the use of this quinone as a caries prophylactic in human beings appear successful. The evidence to support the claims for Vitamin K incorporated in chewing gum is sufficient to encourage further controlled research.⁶

Limited experience with fluoride mouthwashes has not given promise of results for general home use.⁷ Neither do the experiments with fluorine tooth polishing pastes appear to offer promise.⁸ While on the subject of other uses of fluorine it must be said that studies on the daily supplements of fluorine in capsule or tablet form for children under eight years are not sufficiently advanced to warrant conclusion regarding the value of this method.

From this brief and partial account of the knowledge gained during the past 15 years, it is apparent that much progress has been made. Assuming equal progress during the next decade, which is not unreasonable, we should have many of the missing answers to an effective dental caries control program.

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MEET OUR CONTRIBUTORS

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Frank P. Bertram, D.D.S., M.P.H., Oklahoma City, guest speaker at the annual meeting, has a paper on "The Prevention of Dental Caries" in this issue. Dr. Bertram was graduated from Washington University in 1929 and is a member of the county, state and American Dental Association, American Public Health Association and the Association of Public Health Dentists.

ROENTGEN DIAGNOSIS OF CARDIAC LESIONS*

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The first consideration in a discussion of roentgen diagnosis of cardiac lesions is the determination of heart size. There are many methods of arriving at a value for normal heart size as far as transverse cardiac diameter is concerned, and one most widely used is the ratio of the transverse diameter of the heart measured from its furthest extent to the right and to the left, as compared to the transverse diameter of the thorax. The ratio is supposed to be two to one or better; that is, the width of the thorax should be at least twice as great as the transverse diameter of the heart. Although it has long been felt that this is a rather crude method of estimate and of doubtful value, it still is the most commonly employed and, as a matter of fact, in the past two years some evidence has begun to accumulate to indicate that it is more accurate than we have been led to believe. At least one published paper correlates the post-mortem and ante-mortem measurements very closely. Another commonly used method is to superimpose the patient's fist over the cardiac shadow as obtained in the roentgenogram. This is also somewhat crude but effective for day to day use, the fact remaining that a cardiac outline exceeding that of one's fist does indicate an enlarged heart. A more accurate estimate, however, involves the use of a chart which is based on the height and weight of several thousand healthy individuals, as compiled by Ungerleider, compared to the average transverse heart diameter of these screened, healthy individuals.

It is also possible to estimate the frontal cardiac area from routine films by a mathematical formula. Since the heart outline is considered to be an ellipse, the area is equal to the perpendicular long and short diameters multiplied by $0.7854 \times \pi/4$. But this does not check out much more accurately than the more simply determined transverse diameter. The same holds for volumetric determinations.

The practical consideration of the determination of heart size is that it is an easily determined measurement. Even in the 70 millimeter survey chest films which the Health Department makes, an estimate of heart size is readily and commonly made. The trouble, of course, comes in trying to use heart measurements to detect early lesions; here the method definitely falls down because of the difficult or almost impossible differentiation between the upper limits of normal and the early or beginning abnormal changes. Too many factors enter in. For instance, a day laborer and a sedentary office worker may be the same height and weight and present identical transverse cardiac diameters, yet the heart size in the office worker may be pathologically increased, whereas the laborer's heart would be within normal range. The actual physical condition of the individual, his muscle tonus, etc., seems to vary the cardiac diameter as it does other components of the body. This holds also with the carefully determined volumetric measurements where the cardiac diameters are cubed or where actual heart models are reconstructed and their displacement in water noted. The values vary too much with changes in intrathoracic pressure during the respiratory cycle and also from other factors. Even the change from standing to sitting position will alter the heart volume as much as 10 per cent. So in the x-ray diagnosis of cardiac lesions we like to depend on the actual heart configuration more than the size. Considerations here are based on the routine posteroanterior films with which we are all familiar.

We can assume roentgenologically that four general heart outlines are recognizable: (1) normal heart, (2) hypertensive heart, (3) the so-called "aortic" heart configuration, and (4) the mitral configuration. The normal heart outline consists of a contour in which the left ventricle curves out smoothly; immediately above it is the auricular contour which may be absent, or

present only to a slight degree. Above this level is the so-called pulmonary conus which is supposed to represent the arching portion of the pulmonary artery before its bifurcation. Above this level is the normal aortic knob and the left border of the aortic arch. The right heart border consists mainly of the ascending portion of the aorta and partial outline of the right auricle. It must be realized that the right ventricle projects anteriorly and is not actually seen in the routine P-A projection unless the pulmonary conus is to be considered part of the right ventricle. The hypertensive heart typically has a bulging left ventricle with rounding of the apical portion, the heart sitting rather high on the diaphragm with no particular elongation of the left ventricle segment. The cardiac waist portion may be slightly widened and most commonly there is some bulging in the ascending aorta. As opposed to this, the aortic configuration shows prominence of the left ventricle, but this segment is elongated and tends to extend below the actual diaphragmatic line, with no particular rounding of the apical portion. Most notable in this configuration is the constantly narrow cardiac waist. The aortic knob may look prominent due to this narrowed waist portion. In the mitral heart, of course, the heart assumes a pear-shape with straightening of the left cardiac border and usually actual bulging of the pulmonary conus segment. The aortic knob, and this is important, is usually small.

There are variations from this classification, of course, and a commonly noted configuration is termed the combined mitral-aortic outline wherein mitral and aortic valve lesions exist simultaneously. Even the simple mitral configuration is altered when mitral insufficiency eventually develops in conjunction with the stenosis, thus allowing for marked enlargement of the left ventricle.

Also readily definable in these routine films is the contour and configuration of the aorta. Elongation and tortuosity of this vessel occurs consistently with arteriosclerosis, and migration of the aortic knob to near the

level of the clavicle is sure evidence of elongation. The bulge of the ascending portion along the right cardiac border and of the descending portion along the left cardiac border fit in with the tortuosity to be expected.

Since cardiac aneurysm is said to occur in about nine percent of all cases of cardiac infarction studied at autopsy, it would seem that this type lesion would be readily definable on teleoroentgenograms, but of course much depends on the anatomic location of the infarct. In the case of involvement of the left ventricular wall, the most commonly noted alteration is a sharply defined bulge. The lesion may well be suspected from the film but is, of course, much better diagnosed by fluoroscopy where the paradoxical filling of the aneurysmal bulge is noted on systole and flattening out on diastole.

In the diagnosis of congenital heart lesions the routine film is of prime importance in coarctation of the aorta where notching of the inferior rib margins is apparent from the enlarged intercostal arteries which develop for the necessary collateral circulation. Although this finding has been reported in individuals as young as six years of age, it is usually not discernible before 15 years. In patent ductus arteriosus the radiographic findings are not pathognomonic. Although prominent conus and engorged hilar vessels are often listed as supportive findings, these are not detectable in a great many of the cases that have been successfully operated both at Johns Hopkins and at the Children's Hospital in Boston. Description of the fluoroscopic examinations, the use of catheterization of the heart chambers, along with angiocardiography, does not fall within the province of this type of paper.

SUMMARY

1. The simpler methods of cardiac size determination from routine films are discussed.

2. Analysis of the cardiac silhouette to be found on routine chest films is outlined.

DEATH RATE AT NEW LOW

The death rate for the U.S. in 1948 was the lowest in the history of the country, according to figures recently released by the Public Health Service's National Office

of Vital Statistics. It is significant that major chronic diseases associated with advanced age accounted for 63 of every 100 deaths.

ROENTGEN DIAGNOSIS OF THE ANTRUM OF THE STOMACH*

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It is a surprising fact that with all the advances in diagnostic methods of the past 20 years, the incidence of gastric carcinoma and its low five year survival rate has shown very little improvement.¹ This is in most cases a result of delay in adequate work-up of patients until the disease is far advanced. Usually the patient fails to seek medical care because of the mildness of early symptoms. Sometimes the family physician minimizes the patient's complaints and adequate x-ray and laboratory studies are deferred until the disease is more obvious; then radical curative measures are too late.

It usually falls on the radiologist to demonstrate objective evidence of organic disease of the stomach. In patients with obvious pathological changes, such as well demonstrated ulcer niches, large tumor filling defects, rigid gastric wall infiltration, or obvious duodenal deformities, there is usually no significant problem as to diagnosis or differential diagnosis. However in very early lesions and especially those in the prepyloric or antral segment of the stomach, not only can small lesions be overlooked but often it is impossible to differentiate the exact type of such a lesion.^{2 3 4}

The fact must never be overlooked that the problem of differential diagnosis depends on all data concerning the patient; i.e., the history, physical examination, laboratory findings, endoscopy, cytological studies of exfoliated cells as well as the radiological examination. Even then exact diagnosis may be obscure. It sometimes happens that the pathologist may be unable to give a final diagnosis until multiple microscopic examinations have been studied.⁵ The x-ray study however is most important and unless carried out with a careful routine, good technical methods, and by an experienced observer, may fail to demonstrate early lesions.

There are a few technical considerations of importance to be stressed. First, the observer must be *well* accommodated and that takes 15 minutes by the clock. Secondly, the mucosal pattern and gastric wall mobility must be carefully observed using palpation and compression with a small amount of barium. Barium in large amounts conceals as much as it reveals. Thirdly, good spot films are invaluable to record pertinent fluoroscopic observations.

Prepyloric Ulcer: Ulcers in the prepyloric region may show associated changes such as a "meniscus" sign, infiltration of the adjacent gastric wall or an associated filling defect of a tumor mass. Any of these findings speak for carcinomatous character of such an ulcer. Likewise a cleanly punched-out ulcer which may extend beyond the contour of the lesser curvature, or ulcer with associated duodenal deformity is almost always a benign peptic ulcer. Recently a few cases have been reported of malignant gastric ulcers occurring in patients having associated peptic ulcers.⁶ In addition the factor of spasm must be kept in mind. It is not uncommon to see constant annular narrowing of the prepyloric segment associated with a benign gastric ulcer. This often is constant in repeated films, does not relax with antispasmodics, and closely simulates an early annular carcinoma. The radiologist should detect such lesions and be very circumspect about making a dogmatic diagnosis. Holmes and Hamptom⁷ in reviewing a series of prepyloric ulcerations found a high percentage of malignant ulcers that they could not differentiate from benign peptic lesions; they recommend resection in all such cases. The group at Mt. Sinai⁸ are more conservative and advise a period of observation under strict medical management before advising resection in these equivocal cases.

Case No. 1 R. A., White female, age 36, housewife, had a history of a rather severe

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pain localized to a small area in the epigastrium and radiating to the back; onset since November 1, 1948. The pain was dull and aching; was thought then to have "gall bladder trouble" and strict diet relieved her for about two weeks. Gastro-intestinal x-ray series was then done in Joplin, Mo., in January, 1949, and no gastric or duodenal disease was found. A regimen of liquid diet and medications afforded some symptomatic relief for about three weeks. After falling on the ice in February, 1949, she had a recurrence of the pain which was more severe. It was worse at night waking her up about 2:00 A.M. There was no relief or aggravation of pain by food intake. No diarrhea, constipation, nausea, vomiting, or food intolerance were noted. The pain was localized to the one small area in the epigastrium. There has been a slight weight loss in the past few months. The physical examination was essentially negative except for localized tenderness in the epigastrium; no masses or enlarged abdominal viscera were palpable. Pelvic examination showed old laceration of the cervix and evidence of chronic cervicitis.

The laboratory findings were as follows: Blood counts, urine, serology, and sedimentation rates were essentially negative. Gastric analysis on January 6; 41 units free acid, 51 total.

X-rays taken February 19, 1949, showed a small gastric peptic ulcer on the posterior wall of the antrum. Patient had excellent response to medication and diet. X-rays rechecked on April 7, 1949, showed complete disappearance of the ulcer.

Case No. 2: H. E. White male, age 58, entered the hospital on September 29, 1948, with a history of severe upper abdominal pain of 48 hours duration. He had previous attacks of similar pain with nausea, heartburn, belching, and vomiting for the past 30 years at intervals. Hospitalized two years previously for hematemesis and x-rays then revealed a duodenal ulcer with five hour gastric residue. Has had intermittent bloody diarrhea since 1919 and amœba found in 1925. Physical examination was essentially negative except for localized tenderness in the epigastrium.

The laboratory findings were as follows: Urine showed a trace of albumin and occasional white blood cell. WBC-10,300, Hemoglobin-14.1gms., Sedimentation rate-15mm. Two stools were negative for amœba; total serum protein was 7.9 per cent.

X-ray examination showed a well-defined prepyloric ulcer niche and a 40 per cent five hour gastric residue.

Gastric resection was done December 13, 1948, and revealed a thickened and fibrotic pylorus and healed gastric ulcer. His post-operative course was complicated; he developed a penicillin rash and had nausea and vomiting. Exploratory laparotomy on December 29th, 1948, showed herniation of an anastomotic loop through mesocolon with "caking" of the efferent loop. This was freed and sutured in position. Patient gained well and was discharged in February, 1949.

Case No. 3: R. W., White male, age 51, gave a history of "stomach trouble" of eight years duration; had "sour" stomach with flatulence, no vomiting, hematemesis, melena, or weight loss. Three weeks prior to admission patient had severe persistent upper abdominal pain and x-rays taken as an outpatient showed a prepyloric ulcer. Physical examination was essentially negative except for tenderness in the epigastrium and varicose veins of both extremities.

The laboratory findings were as follows: Urine and Kahn- negative; Hemoglobin-15.4 gms., WBC-8,600; Gastric analysis showed total of 38 and free acid of 22.

Re-check x-rays showed a prepyloric deformity and crater and an old duodenal bulb deformity without a demonstrable crater. There was a narrowing of the prepyloric segment. Because of the latter finding the possibility of an early malignant lesion could not be ruled out and surgery was advised. Gastric resection on January 7, 1949, revealed a prepyloric benign ulcer.

Case No. 4: O. S., White male, age 50, had a history of epigastric pain for three years. Some anorexia, dyspepsia, flatulence, occasional episodes of vomiting, but no vomiting of blood or tarry stools. Physical examination was essentially negative.

The laboratory findings were as follows: Urine-negative, Hemoglobin-13.3 gms; Sedimentation rate-19, Kahn-negative; Gastric analysis showed 60 total and 48 per cent free.

X-rays showed a prepyloric deformity consisting of narrowing and a demonstrable shallow ulcer crater. The possibility of malignancy could not be ruled out and resection was done on December 21, 1948. Pathological specimen showed evidence of early ulcerative carcinoma. The patient had an uneventful post-operative course.

Case No. 5: E. E. B.; White male, age 59, was first admitted in March, 1946, for epigastric pain and malignant gastric ulcer was diagnosed. Surgery was contraindicated at that time because of coronary sclerosis. Symptoms of epigastric pain and vomiting became more severe in past six months. Patient lost 19 pounds in weight; there was no hematemesis or melena. No precordial pain or angina were experienced in the past year. Physical examination was essentially negative except for general malnutrition and localized tenderness in the epigastrium. No abdominal masses or enlarged viscera were noted. Blood pressure was low 90 60.

The laboratory findings were as follows: Urine and Kahn-negative, Hemoglobin-14.1 gms., WBC-12,000, sedimentation rate 22 mm; Total serum protein was 6.8 per cent, icteric index was 10.8, Cephalin flocculation ++, Gastric analysis—total acid 110, free acid 10. Electrocardiogram showed evidence of "chronic coronary insufficiency."

X-rays taken revealed a large ulcer of the lesser curvature of the antrum and stomach with rigid canalization of the prepyloric segment. There was a 75 per cent five hour gastric residue and 50 per cent gastric residue in 24 hours.

Gastric resection done on December 12, 1948 revealed a firm mass in the antrum with one metastatic nodule in the mesentery. Microscopic examination of specimen revealed adeno carcinoma. Patient recovered well, gained weight, and was discharged.

Antral Gastritis:

In addition to the ulcerative lesions there are other entities that may simulate carcinoma of the pylorus. The most important of these is antral gastritis of hypertrophic type. The characteristic x-ray findings are coarse thickened mucosal folds, oftentimes running crossway and showing a rigid pattern that may be superimposed in multiple films. When there is associated pylorospasm and superficial ulceration, this may simulate carcinoma. Oftentimes there is associated hypo or achlorhydria. Moersch⁶ of the Mayo Clinic reports a 10 per cent error in the diagnosis of this condition from carcinoma in a series of 100 cases of proven hypertrophic gastritis. Likewise Kirklin shows a 10 per cent error in 100 cases of proven carcinoma where gastritis was erroneously diagnosed. These pathologically proven errors occurred in spite of careful radiologic and gastroscopic studies. The infiltrative carcinoma is the type confused with hypertrophic gastritis.

Case No. 6: O. M., White male, age 31, farmer had a history of chronic alcoholism,

nervousness, upper abdominal cramps since 1942 while in service; had occasional vomiting and nausea. He was x-rayed in the Army and told he had a "deformity of the stomach". He has had recurrent symptoms since with five episodes of hematemesis. Physical examination was essentially negative.

The laboratory findings are as follows: Urine and serology-negative, WBC-6,500, Hemoglobin-100 per cent, Sedimentation rate-5 mm, Gastric analysis-68 per cent total, 37 per cent free.

X-rays taken on September 22, 1948 revealed a persistent narrowing of the prepyloric segment with demonstrable parallel mucosal folds with no evidence of ulceration or deformity. There was a mushroom type of duodenal base. No demonstrable crater, niche, or deformity of the bulb was noted. There was about 25 per cent five hour gastric residue. The findings were considered compatible with a diagnosis of antral gastritis.

Gastric resection done September 28, 1948 revealed hypertrophic pylorus "resembling that seen in infants"; some hypertrophic antral rugae was also found. No evidence of malignancy was noted on microscopic examination.

Rarer entities such as hypertrophic pyloric stenosis in adults, syphilis of the stomach, and benign gastric polyps must be differentiated from malignant lesions but will rarely be encountered by the average practitioner.

In summary I want to again stress:

1. The importance of careful x-ray studies in patients presenting early gastro-intestinal symptoms.

2. Surgical resection and microscopic examination is the only final diagnostic proof in cases of early equivocal lesions. It may be wise to observe such lesions under strict medical and dietary regime for a few weeks of therapeutic test prior to advising radical surgery.

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THERAPEUTIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pediatrics and Bacteriology.*

IMMUNIZATION

HENRY B. STRENGE, M.D., HOMER F. MARSH, PH.D.,
CARROLL M. POUNDERS, M.D., AND J. NEILL LYSAGHT, M.D.

DR. STRENGE: The general topic for today's discussion is immunization in childhood. I have a question for Dr. Pounders. At what age do you recommend, Dr. Pounders, that pertussis vaccine be administered?

DR. POUNDERS: I have a sort of double standard that I go by in the practice of immunization. My private practice differs from practice among clinic patients. I feel that if inoculations are postponed until the baby is six months old one gets a little better and more lasting protection than if given earlier. In other words, the baby should have time to eliminate all the passive immunity he got from his mother, which theoretically might tend to some extent to neutralize the antigen or vaccine which he gets. In private practice I still wait until the child is about six months of age. A good many of the clinic type patients are exposed to and contract whooping cough early, so I think possibly three months of age is a good time to immunize this latter group against whooping cough.

DR. STRENGE: Of the pertussis vaccines on the market, what are the various forms now available and what are the advantages of each?

DR. MARSH: May I, before I get into this question, continue along the lines of the question you asked of Dr. Pounders? Dr. Pounders remarked that he would rather wait until about six months of age in order to start immunization against pertussis, which is very good for the one reason which he mentioned — the fact that there may be a carry-over of antibodies from the maternal circulation which would tend to neutralize some of the antigen and produce a less effective response. Also, one finds in infants

particularly that their antibody response is not as well developed as it is in older individuals. There is quite an accumulation of evidence which would tend to point to the fact that the individual must reach a certain age before he actually is capable of producing his own antibodies. There is what we speak of as a sort of serologic maturity, which the individual must reach before responding very well to immunization. So that if you attempt to immunize individuals at, say two or three months of age, the chances are the response would be very poor.

Now as to the forms of pertussis vaccine which are available, actually I believe they come down to two general forms. One of them is a suspension of heat-killed organisms in saline, running presumably 15 billion organisms per cubic centimeter, but actually probably running up to 25 or 30 billion organisms, which is a very heavy dose of antigen. The disadvantage of this material is the fact that very large doses have to be used. I think a series takes about 2 cc. at a single injection, with three injections constituting the series. If you take a rather fond parent who gets the child into the office, sees it receive such a heavy inoculation, and that accompanied by quite a bit of pain, you may have difficulty in completing the series of injections. That is one disadvantage of the suspension of organisms being used as a vaccine. The hemophilus pertussis is not a particularly good antigen used as a whole organism, so that very large numbers have to be present in the suspension in order to get a decent response. On the other hand the other type of vaccine is one which is prepared from filtrates of the organism, assuming there is an endotoxin which is liberated by autolysis of the organisms, and that endotoxin being responsible for the antigenic stimulus to the patient. It is claimed for the endotoxic filtrates that the reactions are much less severe, and I believe the dose is much lighter.

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

DR. STRENCE: What is the value of aluminum precipitation of pertussis vaccine?

DR. MARSH: Particularly in the endotoxic type of vaccine, the same procedures have been applied as have been used in the preparation of diphtheria toxoid, namely by using the alumina-gel method, not of concentration but of flocculation of the antigen. This assumes that the antigen will be adsorbed to the alumina-gel and as it is injected will form a very slowly soluble depot of antigen in the tissues. Thus there is a long-continued stimulation for the production of antibody, and I believe you will find that antibody titre will be greater than it will be with a fluid toxoid, and moreover it will be a more lasting response.

DR. STRENCE: The same technique has been applied to the whole bacteria pertussis vaccine, hasn't it?

DR. MARSH: That is right. I believe you run into the same difficulties there using alum-precipitation methods. However, the reaction is not quite as severe as if several billion whole organisms are held there in a depot of aluminum hydroxide.

DR. POUNDERS: I, myself, still prefer the suspension of the dead organisms and I use, at present, one made by the Cutter Laboratories in California which is a very concentrated one, 40 billion organisms per cc. If we require a total of 100 billion in the whole series, we can accomplish this by giving a half cc. the first dose and 1 cc. for the second and third doses consecutively at about one month intervals. I may switch over to the alum precipitated material if further evidence shows it to be more effective.

DR. STRENCE: We will probably come back to pertussis in connection with some other problem, but we have a question from the audience which I have passed on to Dr. Lysaught to introduce a different topic. The question is, "Discuss the use of gamma globulin in the management of measles and of other infectious diseases."

DR. LYSAUGHT: I think it has been conclusively shown that gamma globulin in the proper dosage can be used to modify or prevent measles. The usual dose is stated to be around 0.04 cc. per pound of body weight. If an individual is given this dosage before the seventh day following a known exposure he will in most cases not contract measles. If it is given between the seventh and ninth days the measles can usually be modified. As far as its value in other infectious childhood diseases is concerned, the next thing

that comes to mind is rubella. It is not felt that gamma globulin is of value in the treatment of rubella. It has been used in women who have been exposed to rubella in the first trimester of pregnancy and very large doses have been injected intramuscularly (20 to 30 cc.). I have not known a case of rubella to occur in an individual so injected. When used it must be remembered that one runs the risk of inapparent infection of the mother with resultant damage of the fetus. Its value in chicken pox is probably nil. There has been one report, which was not very well controlled, of its use in an orphanage epidemic, and I do not believe it is of any use.

In infectious hepatitis is is thought that it can be used to prevent the disease if given in good sized dosages and early after exposure. Stokes, Gellis and their co-workers have proved that. It is thought to be completely without use in homologous serum jaundice, and in fact I have seen one case of fatal serum hepatitis in which the individual had received an injection of gamma globulin for attenuation of measles at just about the proper interval for incubation of serum hepatitis. In mumps it is thought that gamma globulin prepared from convalescent serum given in large doses may prevent or modify orchitis. It is not thought to prevent any of the other disseminated pathology of mumps. It is thought to be of no value in polio so far as I know.

DR. STRENCE: At the recent meeting of the Academy of Pediatrics this problem was brought up and discussed, and it was pointed out that it is possible to prevent certain forms of laboratory polio with gamma globulin. It has not at all been proven that it will prevent clinical polio and that problem is scheduled for quite large scale study, but it must of course be done under strict control. Even if it were effective it would require such tremendous quantities as to render its present use impractical.

With regard to maintaining immunity, what booster doses should be given and when should they be given?

DR. POUNDERS: Booster doses should of course be given for whooping cough because the immunity is not permanent, for tetanus, for diphtheria conditionally, for typhoid if typhoid immunization is to be carried out, and, of course, smallpox vaccinations should be repeated. Whooping cough vaccine booster shots I think should be repeated at yearly intervals beginning in a year following the first immunization. This probably should

be carried out until the child is about six to eight years of age, and then might be discontinued, hoping that one has established a fairly lasting immunity.

DR. STRENGE: If the original pertussis immunization of which you are speaking is given before six months of age, would you feel that a single booster dose was adequate at say nine months or a year of age, or would you insist on a complete repetition of the series?

DR. POUNDERS: I would feel that a single booster dose might be sufficient rather than repetition of the full series. That is my practice. The booster dose is usually the amount that you give in your initial dose of the first series, whatever that may be. As for tetanus, although most writers advise yearly boosters, this disease is not nearly as common as whooping cough and some of these other conditions, and I think that you might lengthen the interval to two years. I do this, but wouldn't argue with anyone who gives it once yearly. Also, give a booster dose of tetanus toxoid whenever there is an injury. I think any booster dose of tetanus toxoid at the time of injury might better be the regular fluid toxoid rather than alum precipitated toxoid because of the necessity for a quicker response. After initial typhoid immunization, a booster dose once a year is adequate. In the case of diphtheria, the Schick test may make booster doses unnecessary. One can do a Schick test each year or every two or three years and be reasonably safe, only giving a booster dose when one finds a positive Schick test. If one doesn't resort to the Schick test I think he should give a booster dose of diphtheria toxoid at yearly intervals, just as with whooping cough vaccine. Smallpox vaccination needs to be repeated about every six years unless there is exposure or the presence of the disease in the community. I believe that covers the booster doses.

DR. STRENGE: I would like to ask Dr. Pounders about the occasional patient who has a persistently positive Schick test after repeated booster doses of toxoid.

DR. POUNDERS: There are a few people that cannot be immunized to diphtheria, apparently, if you are to judge by the Schick test. I generally make a practice of repeating the series about twice, and then if the Schick test is very strongly positive I may even give them a full series for the third time. If it isn't very strongly positive I may give only one booster dose. If after all that

the Schick test is still positive I undertake to immunize them again, and if I fail that time I am pretty apt to give up and tell them to be careful not to get exposed to diphtheria.

DR. STRENGE: I might mention that one of our residents, having been exposed to diphtheria several times, Schick tested himself and found a strongly positive reaction. Having seen some reactions to toxoid he was careful to give himself a Maloney test before he went ahead with the toxoid. You are familiar with the Maloney test — an intradermal test with 1:20 dilution of plain toxoid, read as any other sensitivity test. His forearm became quite swollen and tender, and just out of interest after that subsided he tried another Schick and found that it was now negative. In other words, this very small skin test dose of toxoid was quite sufficient to complete his immunization. Of course the Schick test itself may have had something to do with it. If it is sufficiently potent it may act as a booster. With regard to tetanus I do not think there is any absolute answer; however most children are going to be injured often enough so that they will require boosters every few years anyway.

Here is a question for Dr. Marsh's consideration. Someone asks: "What precautions must be observed in the storage of the immunizing materials?"

DR. MARSH: You will find according to the manufacturers of vaccines that all vaccines should be refrigerated at 40° C., with the possible exception of smallpox virus which should be kept frozen if possible. I really don't know how long an antigen will remain antigenic at room temperature. It depends upon what you mean by room temperature. Do you mean 35 or 40° C., such as we do have around here during the summer, or do you mean room temperature during winter? It is hard to give a satisfactory answer to this question, particularly as antigens as a rule are heat labile after they have been prepared. You may object to that on the basis that bacterial vaccines are prepared by heating the suspension in order to kill the organism, and that is true. But that is a very short heating, usually 50 minutes at not more than 50° C. So I really cannot say definitely, Dr. Strenge, how long you could use the vaccine with any assurance that it would accomplish the job after it had been left out at room temperature. They should all be refrigerated of course

between the period of purchasing them and using them. You will also notice on all packages that there will be expiration dates beyond which the material should not be used.

DR. STRENCE: Would you like to make a special comment on smallpox vaccine?

DR. MARSH: Yes. On smallpox virus the situation is a little different in that the expiration date is so short. With pertussis vaccine, typhoid vaccine, and diphtheria toxoid, the expiration date usually is eighteen months from the time it was packaged by the manufacturer. Smallpox vaccine is a living virus and the expiration date is no more than three months from time of packaging by the manufacturer. It certainly must be kept refrigerated.

DR. STRENCE: What I meant was that I have been under the impression that as much as 24 hours at room temperature is enough to inactivate smallpox virus. Is that likely to be true?

DR. MARSH: Yes, that is true.

DR. STRENCE: I have a question here which I would like to answer. "What would one do in a case of exposure to tetanus if there never has been tetanus immunization with toxoid and there is known sensitivity to horse serum? Could penicillin be used early along with tetanus toxoid, hoping to give the toxoid more time to take its effect?" I would like to answer that because I think it very important. No. Penicillin cannot be counted upon to delay the incubation period of tetanus even long enough to get the initial toxoid effect. Remember that it takes several weeks to get any effect from tetanus toxoid, and from the first dose that level will not be adequate for protection even at the end of three or four weeks. It takes a series of doses to get it up to effective levels. In the second place penicillin is not consistently effective against tetanus at all. We saw one fatal case of tetanus develop here last year in a child who had come into this hospital 24 hours after a burn, had had penicillin every four hours from within two hours after the burn, and continued to receive it here. Two weeks after the burn she developed tetanus in spite of penicillin all that time, so it cannot be relied upon. In the case of the patient sensitive to horse serum there is bovine antiserum available.

I would like to emphasize also in connection with the above case, the child not only had penicillin but received 1500 units, the textbook dose of tetanus antitoxin, at the time of the burn. That is insufficient. At least 3,000 units should be given, and I think 5,000 is probably a better dose.

DR. POUNDERS: You mean with extensive injuries?

DR. STRENCE: Wherever there is a really strong indication for the use of antitoxin prophylactically.

DR. POUNDERS: Yes, and it should be repeated at about weekly intervals.

DR. STRENCE: Where there is a burn of that sort, if one gives it at weekly intervals sensitization will not be a problem, and it can be continued until the burn has healed. Dr. Lysaught, would you care to try this one? "Would you feel it wise to check a pregnant woman's immunity to the various childhood diseases and immunize her against those to which she shows no immunity in order to protect the baby after birth?"

DR. LYSAUGHT: While I think it would be valuable to know what diseases a pregnant woman might be expected to develop under conditions of exposure, I would doubt the value of immunizing her in order to give immunity to the newborn. In the first place the danger of severe reaction from an immunizing agent is apparently greater in the older individual. Certainly the percentage of toxoid reactions of the severer type seem to go up and one might actually cause harm to the fetus. There is no doubt that one can produce immunization to pertussis, and perhaps to diphtheria, by giving the mother injections during her pregnancy, but I do question the wisdom of doing it. I am sure that Dr. Pounders probably has more experience than I. What do you think, Dr. Pounders?

DR. POUNDERS: I know there are doctors who attempt to immunize the pregnant mother against whooping cough, for instance, and then tell her that her child will be immune to it. Personally I think it rather confuses the issue. This immunity cannot be anything but passive on the part of the baby, therefore it cannot be depended upon for any definite length of time. It might, if it gives him more antibodies, interfere some with active immunization later. Therefore I think it is probably a disadvantage more than an advantage.

DR. STRENCE: Will you take this question, Dr. Pounders?

DR. POUNDERS: This question says, "Can you give DPT combinations of booster doses?" That means, I suppose, the diphtheria-pertussis-tetanus. "What objection, if any, to its use?" The combination of course is the same as one may use for initial immunization. Usually the amount of the initial dose would be the booster dose. I see no particular objection to such use of this material. In fact, if you don't resort to a Schick testing it is probably preferable. However there are some objections, especially that there is some tendency on the part of individuals to become sensitive to these toxoids as they get older. Sometimes quite undesirable reactions are encountered, so the fewer you give, the fewer reactions you are going to get.

DR. STRENGE: In the case of a wound where one wanted to protect against tetanus, he wouldn't want to use triple toxoid because that is practically all alum precipitated. In this case use clear tetanus toxoid for more rapid effect.

Another question, getting back to horse serum sensitivity, "Can one just desensitize a patient to horse serum tetanus antitoxin?" We do it all the time, or at least we say we do it. With a child who has a positive skin reaction to horse serum and a wound which seems to indicate antitoxin, we start off with a very small dose of very dilute mixture of saline and antitoxin and give increasing doses of that periodically over a period of 24-28 hours, finally reaching the total prophylactic dose of tetanus antitoxin. Whether we are actually desensitizing or whether we are distributing the shock I don't know. I will let Dr. Marsh answer that a little bit later. I think that is an acceptable alternate to the use of bovine antiserum, but bovine antiserum would be much easier to use if it is at hand. Dr. Marsh, is that desensitization? Is desensitization possible?

DR. MARSH: Inasmuch as we ordinarily think of anaphylaxis as being brought about through the exposure to animal proteins and in view of the fact that individuals anaphylactically sensitized can be somewhat desensitized by the use of the same materials in small doses, I would imagine that in this case you are accomplishing two things. One, you tend to desensitize the patient through the administration of very small doses of the antigen. Secondly, there is a possibility that although you are not desensitizing you may be staying under the limits required to bring about a reaction. I might also men-

tion, and Dr. Strengé has mentioned, the use of bovine preparations. You can even go beyond that. There are available preparations which have been made in the goat, in the event that you run into somebody who might be sensitive to beef, and as a matter of fact I believe there are a few preparations prepared in the rabbit.

DR. STRENGE: There was another question on this topic directed to Dr. Pounders. "What criteria do you use as to when TAT is given to a child? What is the medico-legal aspect if the child develops tetanus and if the TAT was not given?"

DR. POUNDERS: I have come to think more and more that in the case of any child who has a skin abrasion and it is brought to your attention as a doctor, you had better bring up the question of tetanus prophylaxis. Most of the cases of tetanus we have had in the last few years I would say are from rather insignificant injuries, such as a blister on the heel or a small splinter in the foot. If you are going to protect yourself and the patient you had better consider any sort of skin abrasion as a possible source of tetanus and bring it to the attention of the parents. We know there are some types of injuries that are much more dangerous than others, but just because the abrasion is wide open is no guarantee against tetanus. Of course children that have been immunized actively with tetanus toxoid certainly enjoy some protection in the interim between injections, so it is probable that most of these minor injuries would be covered. As for the medico-legal view, if the child develops tetanus and has not been immunized that would be pretty hard to answer. Certainly if it is a wound of any consequence and the child was brought to you or you were consulted about it, if you didn't advise the use of tetanus prophylaxis, I think they would have a pretty good case against you. As for the minor injuries, that would be very debatable. But you would better protect yourself by bringing up the question in the case of all sorts of skin abrasions in children. Immunization with toxoid prior to any injury is of course the ideal situation.

DR. STRENGE: Dr. Lysaught just asked me to ask you to discuss the physician's responsibility for giving anti-rabic vaccine in the case of animal bites.

DR. POUNDERS: I think there too, if you are consulted about this child, if you don't follow out the recommended procedure you

would probably be liable. It depends upon where the bite is, of course. If the bite is about the face and head or a very severe bite, you probably should advise going ahead and giving the rabies vaccine without waiting. You could give it for a period of 10 days, and if the dog is still all right, then stop. If the bite is on the extremities or trunk and the dog is available, you can advise delaying vaccination while keeping the dog penned under observation by a veterinary physician. The idea is that if he has rabies he will not live more than 10 days. I might say in that connection that some question has been brought up about routinely vaccinating all dogs, which is being done in the cities especially. Some think that dogs might develop partial immunity to rabies and become a carrier, or might have a modified form of the disease, surviving longer than 10 days yet still capable of transmitting it. Whether there is anything to that I don't know. I am still going on as I explained.

DR. STRENGE: Do you always give it after rat bites?

DR. POUNDERS: Most rat bites I have seen are rather vicious. I think it well to advise rabies vaccine in those cases.

DR. STRENGE: Has your opinion as to the critical age for immunization been changed by the availability of treatment against pertussis?

DR. LYSAUGHT: No, I don't feel that I want any child to have pertussis if it can possibly be prevented, regardless of the availability of antibiotics. The treatment of pertussis even with the most recent antibiotics is not 100 per cent satisfactory, and we see quite a bit of chronic lung disease which seems to have had its origin in an attack of pertussis. Even if the child has its paroxysms markedly reduced by some antibiotic but happens to aspirate and strangle in one such paroxysm, that is calamitous. So I feel that we should continue to immunize at the earliest possible age and not wait for the disease to develop simply because we have a better method of treatment than we have had in the past.

DR. STRENGE: We have time for perhaps one more question. "Is the use of an antihistaminic with immunization, especially repeated immunizations, of any value in reducing the severity of reaction?" I would like to hear the answer to this question myself and I think the department which is really responsible for these Monday afternoon conferences might answer it. Dr. Hellbaum, would you take this question?

DR. HELLBAUM: Some have advocated the use of antihistaminics in this procedure. I think they certainly would be preferable to epinephrine, but there is insufficient good work to make a definite statement. I think in severe cases of sensitivity an antihistamine drug would have a proper place, but any possible lowering of antibody response is an unknown quantity at the moment.

The following is the suggested schedule for immunization in childhood used in the Department of Pediatrics at the University of Oklahoma School of Medicine:

I. PERTUSSIS

Immunization is by means of injection of killed organisms and is therefore of the antibacterial type which is never as solid or permanent as antitoxic immunity. Three forms of vaccine are available:

a. Saline suspension: Sauer's vaccine. This varies in concentration from 10 to 40 billion organisms per cc. The recommended total dose is 80 to 120 billion organisms given ordinarily in three doses at monthly intervals. (After exposure rapid protection can be obtained by giving plain vaccine 40 billion organisms, three doses at two day intervals. This will be accompanied by moderate reactions and the immunity will be brief in duration but may be sufficient to protect for two or three months.)

b. Alum precipitated pertussis vaccine has been shown to be quite effective; Sako believes it to be the most effective form of pertussis vaccine. He states that the total dose need be only 20 to 40 billion organisms. This material should *not* be given more frequently than monthly. There is some tendency to the formation of sterile abscesses and for this reason deep subcutaneous or intramuscular injection is recommended. (The aluminum hydroxide adsorbed pertussis vaccine does not seem to be as effective as the alum precipitated.)

c. Soluble antigens and endotoxoids prepared from pertussis organisms do not appear to be of value unless combined with the whole organism.

Maximum protective titer is reached in two to six months after pertussis vaccination and is usually maintained for two years. There has been very considerable discussion as to the optimum age for pertussis vaccination. The schedule of the American Academy of Pediatrics Committee recommended six-nine months, basing its opinion on the suspicion that prior to six months poor levels only could be maintained. Since then, Sako has very clearly demonstrated the possibility of immunizing infants below three months of age, by using alum precipitated pertussis vaccine. He feels that it is desirable because of the high early mortality in the disease, and that it is perfectly adequate provided booster doses are given at intervals of no more than two years.

II. SMALLPOX

Immunity is conferred by production of the disease "vaccinia" by introducing the living virus into the skin. Material recommended is still the virus produced from calves; it has been attempted to produce a satisfactory virus on living chick embryo media, but it has not been proven that such virus gives adequate immunization. The multiple pressure technique of vaccination is considered best. With good virus and good technique there should be no failures, although the reactions may be considerably accelerated by immunity. Smallpox vaccination should be done routinely at any age between three and 12 months, and repeated at

six and 12 years of age. Revaccination or initial vaccination should be carried out at any age if an epidemic occurs.

III. DIPHTHERIA

Immunization is produced by injection of a toxoid; toxin antitoxin is no longer used except in a few especially sensitive individuals. The forms available are:

a. Fluid toxoid, which is the best in older children who may be sensitive. Skin test with a 1:20 dilution: the Maloney test. If not sensitive the dose is 1 cc. at three or four week intervals. Small, gradually increasing doses must be used if sensitivity is found.

b. Alum precipitated toxoid is the most widely used material for basic immunization, which should be done between nine and 12 months. Two injections of one cc. are required. The ideal interval is two months, the more practical interval one month. A Schick test should be given at 18-24 months, six years and 12 years, with booster shot if indicated. Some public health programs recommend replacement of the Schick test with the booster shot.

c. Aluminum hydroxide adsorbed diphtheria toxoid, while not established when the Committee report was prepared, seems to produce equally good immunity with less reaction than does the alum precipitated.

Although the Committee recommends diphtheria immunization at 9-12 months, this immunization is also being placed earlier; six months seems satisfactory, and further studies may eventually show the possibility of obtaining persistent immunity with even earlier immunization.

IV. TETANUS

Immunization is produced as in diphtheria, by use of a toxoid which is available in the same three forms as is diphtheria toxoid and is most often used in combination with it. It is very definitely proven that use of the combination produces at least as good an immunity to each disease as does the use of the separate toxoids and since there is no increased reaction, it seems very logical to use the combination. The time of tetanus immunization, therefore, will coincide with the time of diphtheria immunization. A booster shot must be given about one year after basic immunization. Subsequent boosters are still under discussion. In the event of an injury potentially infecting the patient with tetanus organisms, certainly a booster shot should be used, and plain toxoid would be preferable here because of its rapid effect; one cc. subcutaneously, or 1/10 cc. intradermally is effective. Evidence seems to point to the fact that no other boosters are essential, but it would perhaps be safer to give them every two years.

MULTIPLE VACCINES

In addition to the diphtheria-tetanus toxoid mixture discussed above, there are now available a number of combinations of these and pertussis vaccine, which seem to have definite advantage over all other products in that the number of injections needed is reduced. Plain, alum precipitated, and aluminum hydroxide adsorbed materials are available. One such preparation contains in each cc. one human immunizing dose of diphtheria toxoid and tetanus toxoid and 20,000 million phase I pertussis bacteria. Its dose is 0.5 cc., 1.0 cc., and 1.0 cc. at monthly intervals, with a booster dose one year later.

V. TYPHOID AND PARATYPHOID

Immunization is produced by the injection of a suspension of killed organisms: mixture of typhoid, Paratyphoid A and paratyphoid B. Indication will depend upon the possibility of exposure to the disease, in other words, inadequacy of supervision of water and

milk supply. Remember that even in some municipal areas, water is obtained from other than well guarded sources. In infancy, the routine boiling of water and milk renders vaccination against typhoid reasonably unnecessary. After two years, exposure is more likely. The dosage is one-half cc., 1 cc. at one to four week intervals. (If immunization should be given below two years of age, use half this dosage). A booster dose should be given every year or two. It may be 1 cc. subcutaneously or 2/10 cc. intradermally.

VI. SCARLET FEVER

Active immunization can be brought about by injection of the soluble scarlet fever streptococcus toxin in increasing doses at weekly intervals. Reactions are fairly severe and the value is open to question. It is probably not indicated in ordinary practice, but may be of considerable use in institutional epidemics. The Dick test, an intradermal test with the toxin, measures susceptibility to the disease: use 0.1 cc. and read at 24 hours.

VII. RESPIRATORY INFECTIONS

These are not generally considered among the diseases against which immunization is routinely advised. Effective immunization is available against influenza and specific pneumonia, in the form of influenza A and B virus vaccine, and solutions of pneumococcal polysaccharides. These immunizations are, of course effective only against the specific organisms they represent and not against the common cold or against respiratory infections in general. They probably are particularly indicated at times of epidemics or in the case of peculiarly susceptible children. For influenza A and B vaccine the dose is 0.5 cc. subcutaneously, repeated in a week. For pneumococcus a single injection of 0.5 cc. is sufficient for children under 12; there are two forms: combination A, including types I, II, III, V, VII and VIII, and combination B, including types I, IV, VI, XIV, XVIII and XIX. It may be desirable to give one injection of each of these two combinations in order to obtain as wide a range of immunity as possible. These immunizations are effective for a single season only.

Other vaccines against respiratory infections, that is, the so-called "cold vaccines" are of uncertain value.

VIII. TUBERCULIN TEST

Tuberculin test is, of course, not an immunization, but a test for infection with the disease. It is generally included in immunization schedules and therefore should be considered at this point. The intradermal injection of diluted old tuberculin is generally accepted as the most accurate test. 0.1 cc. of the 1:1000 solution is the usual dose and the test should be read at 72 hours. In some cases it may be well to follow with a trial of 1:100 dilution if one wishes to rule out the possibility of slight sensitivity. P.P.D. (purified protein derivative) is used in the same manner and in two strengths which correspond roughly to 1:1000 and 1:100 of O.T. The patch test is somewhat less reliable than the intradermal injection but is very popular because of its non-traumatic nature, and for this reason, its use probably results in a survey of a much larger fraction of the population. The patch should be kept on for 48 hours and the results read 48 hours after its removal.

SCHEDULE SUGGESTED BY THE AMERICAN ACADEMY OF PEDIATRICS COMMITTEE

1. Smallpox.

Routinely 3-12 months, repeated at six years, twelve years, and at any age during an epidemic.

2. Diphtheria, or diphtheria-tetanus.

- 9-12 months.
3. Pertussis.
- 6-9 months (it is questionable whether this should be employed after six years.)
4. Schick Test.
- 18-24 months. Reimmunization with diphtheria toxoid if necessary. Repeat this procedure at six years and twelve years.
5. Tuberculin Test.
- Three years and as indicated thereafter; every three years is suggested.
6. Tetanus Toxoid.
- At any age, usually in combination with diphtheria. Booster at one year and at the time of any injury.
7. Multiple combined vaccines are now being used safely against diphtheria, tetanus, and pertussis, starting at 3 months of age.
8. Scarlet Fever Toxin.
- When indicated in special circumstances.
9. Typhoid Fever Vaccine.

At any age after two years — when and where it is indicated.

SAKO'S REGIME FOR EARLY IMMUNIZATION

- One Month—Alum precipitated pertussis vaccine.
- Two Months—Alum precipitated pertussis vaccine.
- Three Months—Alum precipitated pertussis vaccine.
- Four Months—Smallpox.
- Five Months—Typhoid-paratyphoid.
- Six Months—Typhoid-paratyphoid.
- Seven Months—Typhoid-paratyphoid.
- Eight Months—Combined diphtheria and tetanus toxoid; (Alum precipitated or alhydrox).
- Ten Months—Smallpox, if not previously given.
- Twelve Months—Tuberculin test and a diphtheria, pertussis, tetanus combination booster.
- Fifteen Months—Schick Test.
- Two Years—Tetanus booster, typhoid booster.
- Three Years—Pertussis booster.
- Six Years—Schick, Smallpox revaccination, pertussis booster.

MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

In introducing this new department in the Journal, it is not the intent to condemn or commend the articles reviewed but to inform our readers as to content and where it can be found. When a patient says, "What about that article?", the physician can say, "I know about that article and my impression is so and so."

It is hoped that this type of reporting may help physicians who are too busy to read current lay publications. For each issue we will summarize some of the articles and list the titles of many more that appear in a great number of popular lay magazines in the hope that the physicians will know that such an article has appeared in the lay press.

"I Had My Baby Without Pain" — Betty Cockrell — *Today's Woman*, January, 1950, page 6. This is one person's picture of how she felt and performed under hypnosis throughout the course of her pregnancy and delivery. In reviewing this material, the quotation by William Harvey in 1628 is still apropos. "It is fallacious to attempt to draw general conclusions from one particular proposition."

"Before Your Operation" — Kate Holliday — *Woman's Home Companion*, January, 1950, page 44.

This is a serious attempt by the author to explain to the prospective surgical patients the why's and wherefore's of all office and hospital procedures from the time such an operation was scheduled through the surgical performance including the aid of assistants and nurses.

A great many fears of the patient could be allayed by the surgeon explaining these little things but we become so used to them we don't think about them or won't take the trouble. If surgical prospects could read this article or have such an explanation from the surgeon, they would be more cooperative.

"The Race Against Pain" — Clarence Woodbury — *American*, January, 1950, page 26. A comprehensive review of all the recently discovered drugs, and some that are purely hypothetical, not only for use in the relief of pain but in all fields of medicine. This doesn't glorify them or claim that any of them are the panacea but it represents an honest effort to show that not all the so called "wonder drugs" announced in the press measure up to the claim accorded them. However, it does give credit to those now in everyday use and also the hope that others still in the experimental stage may prove effective.

A PREVIEW OF SOCIALIZED MEDICINE

Following is a chronological history of a Federal Employees' Compensation case as experienced by a member of the A.M.A. Board of Trustees:

July 26—Doctor requested authorization to operate on hernia of occupational origin (bilateral).

Sept. 10—Reply received asking for a report on form CA 32.

Sept. 14—Report mailed.

Nov. 5—Date of order authorizing operation on left hernia only.

Nov. 10—Doctor again requested authority to do bilateral operation.

Dec. 31—Another letter by doctor to government bureau as a tracer to Nov. 10 letter.

Jan. 27—Letter from bureau states the request is quite unusual as one hernia is of long duration, but claim was being referred for decision.

Feb. 8—Date of authorization to operate on left hernia, bureau stating that it did not object to having right hernia repaired at no expense to government, etc.

Ho, hum, and no doubt the doctor expected the check in his Christmas mail — next Christmas, that is.



To Calais

The Bettman Archive

The nausea, vomiting and dizziness of motion sickness may be prevented or relieved, in a high percentage of cases, with Dramamine* (brand of dimenhydrinate).

DRAMAMINE for the Prevention and Treatment of Motion Sickness.



*Trademark of G. D. Searle & Co., Chicago 80, Illinois

President's Page

The School of Medicine of the University of Oklahoma is nearing the end of its first year of preceptorship training for senior medical students. This has been a forward step of tremendous possibilities for the betterment of medical practice in Oklahoma. It has provided and will continue to provide the students with practical experience which will serve them well in the orientation process that all must encounter in going from the academic training into actual practice of medicine.

After studying the plans and their operation in other states, notably Wisconsin, your medical school gave the responsibility for the organization of such a program to a committee consisting of representatives of the medical school faculty, medical school alumni, and the Oklahoma State Medical Association, rather than giving it to one individual. This is as it should be.

It must have required much time and deliberation on the part of the committee in the selection of the first group of preceptors. We recall the committee reported that it had fully twice as many qualified physicians applying as could be appointed. This was due to the limited number needed, the size of their town or city with preference being given generally to the smaller locations, and the geographical distribution. These facts, together with the state law requiring annual appointment of preceptors will no doubt necessitate new appointments from time to time.

Publicity concerning this program in Oklahoma has appeared in the New York Times and the radio broadcast, "Voice of America". Inquiry from adjoining states comes to us on the method of setting up and operating such a program.

It was our privilege to sit in at the mid-year meeting of the preceptors and associate preceptors as they met together and discussed their experiences, problems and future plans for this phase of medical teaching. It was most stimulating and encouraging to observe the enthusiasm and the sincere and serious attitude of that group of physicians toward the responsibility and opportunity afforded by the preceptorship, thus assuring the success of the plan.

That these senior students may see all phases of the practice of medicine and the life of the physician and his family in the smaller areas, the preceptors or associate preceptors should introduce them to the social, civil, cultural, religious and recreational activities of their communities. Wherever practical, the wives of these students should accompany them on their preceptorship training, that they too may see these things and know them for their real worth.

Physicians interested in qualifying as preceptors should write to the Dean of the University of Oklahoma School of Medicine, 801 N.E. 13th., Oklahoma City.

George H. Garrison
President.

LIQUID
Bi-sulfazine
(SULFADIAZINE-SULFAMERAZINE COMBINED)

Palatable, low-toxicity sulfanamides which are even less toxic (in so far as renal damage is concerned) than either drug alone.

Each 30 cc. contains:
Sulfadiazine, microcrystalline
1.5 Gm. (22 grs.)
Sulfamerazine, microcrystalline
1.5 Gm. (22 grs.)
Each teaspoonful (5 cc.) supplies 0.5 Gm. (7 1/2 grs.) of total sulfanamides.

WARREN-TEED
Pharmaceuticals

THE WARREN-TEED PRODUCTS CO.
COLUMBUS 8, OHIO

PUBLIC RELATIONS REPORTER

NEW BROOKINGS REPORT

The Brookings Institution of Washington, D. C., a privately financed economic research organization, has announced its findings in a new study of the cost of financing Social Security. The report seriously questions the financial soundness of the present Social Security system and of the administration's proposal for its expansion. It recommends a pay-as-you-go system in which each generation would take care of its own dependents.

"Mushrooming benefit costs," the report says, "expanding annually for the next 50 years, may result in a burden of taxation beyond the capacity of the economy to support without a substantial increase in the price level." The Brookings Institution recommends that the current pattern of old age and survivors insurance with its pseudo resemblance to private insurance, should be abandoned entirely and a pay-as-you-go plan enacted.

NEW RADIO PROGRAMS AVAILABLE

A group of new public service radio programs is available for local sponsorship by County Medical Societies. If your Society is interested in obtaining one of these, contact the Public Relations Secretary at the Executive Office, 210 Plaza Court, Oklahoma City 3.

THE DRUGS YOU USE — common sense information about the drugs you use. Outstanding medical authorities interviewed by Harriet Hester. 13 programs in series, 15 minutes each.

LIVING PROOF — recorded experiences in the actual words of patients, presented in interview style, with discussion of specific conditions by qualified medical specialists and a closing summary by W. W. Bauer, M.D., of A.M.A. 13 programs in series, 15 minutes each.

DOCTORS MAKE HISTORY — the lives of eminent physicians and their contributions to medicine dramatically narrated by Jim Ameche. 13 programs in series, 15 minutes each.

YOUR CHILD GOES TO SCHOOL — questions relating to the health of school children, discussed by D. A. Dukelow, M.D., and Fred V. Hein, Ph.D., of A.M.A. 13 programs in series, 15 minutes each.

SOCIALIZED MEDICINE — a talk by Louis H. Bauer, Chairman, A.M.A. Board of Trustees. 15 minute single program.

SOCIALIZED MEDICINE IN ENGLAND — talk by Ralph J. Gampell, M.D., formerly of Manchester, England. 15 minute single program.

HEALTH INSURANCE POLL

The New Jersey Poll, conducted by the Princeton Research Service, reported recently that at the close of 1949, 46.6 per cent of New Jersey's adult population felt that Congress should pass the Truman compulsory health insurance plan. 43.4 per cent opposed the program and 10 per cent were undecided.

The Poll characterized the margin of 3.2 per cent as "very narrow" and stated that all their survey findings are subject to an average error of four percentage points because of sampling variations.

As in previous polls, most emphatic support for the Truman plan was found in the biggest cities. In rural communities and medium sized towns, a clear majority appeared to oppose compulsory health insurance, whereas in cities of 100,000 or more, the vote ran nearly two to one in favor of the plan. Younger people are found to be much more likely to favor compulsory health insurance than those 45 years of age or over. And in general, the more education a person has the more likely he is to oppose compulsory health insurance.

HEALTH OFFICERS OPPOSE COMPULSION

Health officers would inevitable be among those chiefly responsible for administering a plan of national compulsory health insurance. In the past, many health officers have been less than enthusiastic in their opposition to federally controlled compulsory health insurance plans. However, the Executive Committee of the Association of State and Territorial Health Officers has taken a firm stand opposing such plans in recent Senate hearings on health bills.

The Association opposed the administration's bill to socialize medicine (S. 1679) stating in part "The Association is opposed to the principle of compulsory health insurance and believes that such a program, initiated at national level, should not be resorted to until all other avenues of approach, such as research, hospital construction, aid to education, extension of and complete coverage by local health services, and voluntary hospital and medical care programs have been given the fullest opportunity under favorable conditions and proven inadequate to the needs of the people."



*in Mixed
Bacterial
Genitourinary
Infections*

Aureomycin is now rapidly becoming recognized as a drug of choice in the treatment of mixed bacterial genitourinary infections, particularly those in which *Escherichia coli* and *Aerobacter aerogenes* play a part. Intractability of a genitourinary infection is an especial indication for aureomycin.

Aureomycin has also been found highly effective for the control of the following infections: African tick-bite fever, acute amebiasis, bacterial and virus-like infections of the eye, bacteroides septicemia, bouton-neuse fever, acute brucellosis, Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), Gram-negative infections (including those caused by the *coli-aerogenes* group), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, peritonitis, primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, tularemia and typhus.

AUREOMYCIN HYDROCHLORIDE LEDERLE

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.

Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

AUREO- MYCIN

SHORT COURSE SLATED IN GENERAL SURGERY

Strengthening general surgical topics, the problems which are confronted in every day practice of those in general practice as well as those specializing in surgery, a three day short course in general surgery will be presented at the University of Oklahoma School of Medicine April 6, 7, and 8. Guest speaker will be Champ Lyons, Professor of Surgery at the Alabama Medical College.

Primarily intended for Oklahoma physicians and surgeons, the course is open to any doctor of medicine from adjacent states. Operative clinics must be restricted to the first 30 registrants because of limited space but there will be no limit on enrollment for the rest of the course.

Registration fee will be \$15.00.

Program is as follows:

PROGRAM GENERAL SURGERY Thursday, April 6, 1950

- 8:30 A.M. Registration
Morning Session Moderator—A. Ray Wiley, M.D.
- 9:30 A.M. Diagnosis of Acute Abdominal Disease, Gregory E. Stanbro, M.D.
- 10:15 A.M. Recognition of Abdominal Lesions from Gross Appearance, Howard C. Hopps, M.D.
- 11:15 A.M. X-Ray Diagnosis of Surgical Lesions of the Abdomen, P. E. Russo, M.D.
- 12:15 A.M. Recess for Lunch
Afternoon Session Moderator—O. R. White, M.D.
- 1:45 P.M. Abdominal Manifestations of Genito-Urinary Disease, Basil A. Hayes, M.D.
- 2:45 P.M. Applied Anatomy of Peritoneal Cavity, Ernest Lachman, M.D.
- 3:40 P.M. Recess
- 4:00 P.M. Early Recognition of Neoplasms of Colon and Rectum, R. L. Murdoch, M.D.

Friday, April 7, 1950

- 8:00 P.M. to 11:00 A.M. Operative Clinics
Austin H. Bell, M.D., E. M. Farris, M.D., Gregory E. Stanbro, M.D., S. N. Stone, M.D., D. W. Brauhau.
Anesthesia—H. A. Bennett, M.D.
- 11:15 A.M. Principles of Surgical Technique, H. C. Dodson, Jr., M.D.
- 12:15 P.M. Recess for Lunch
Afternoon Session Moderator—Ray H. Lindsey, M.D.
- 1:30 P.M. Surgical Management of Peptic Ulcers, C. M. O'Leary, M.D.
- 2:30 P.M. Hazards of Gall Bladder Surgery, F. M. Liengenfelder, M.D.
- 3:15 P.M. Recess
- 3:30 P.M. Ruptured Ectopic Pregnancy, Joseph W. Kelso, M.D.
- 4:15 P.M. Pediatric Surgery, Patrick S. Nagle, M.D.

Saturday, April 8, 1950

- Morning Session Moderator—C. E. Clymer, M.D.
- 9:30 A.M. Acute Blood Loss, Joe M. Parker, M.D.
- 10:30 A.M. Relation of Hypoproteinism to Wound Healing, Champ Lyons, M.D.
- 12:00 M. Recess for Lunch
Afternoon Session Moderator—L. J. Starry, M.D.
- 1:30 P.M. The Ruptured Appendix, Everett B. Neff, M.D.
- 2:30 P.M. Management of Surgical Infections, Champ Lyons, M.D.

CLINICS TO FEATURE FOURTH CIRCUIT

Robert M. Becker, M.D., will open the fourth circuit of instruction in Internal Medicine on March 20. The teaching centers will be Guthrie, Ponca City, Stillwater-Cushing, Bristow-Sapulpa, and Tulsa.

With the cooperation of the physicians attending, a clinic will be held by Doctor Becker in the evening before the lecture. Physicians having patients who are diagnostic or therapeutic problems are encouraged to bring their patients to the clinic for presentation and discussion by Doctor Becker and the group.

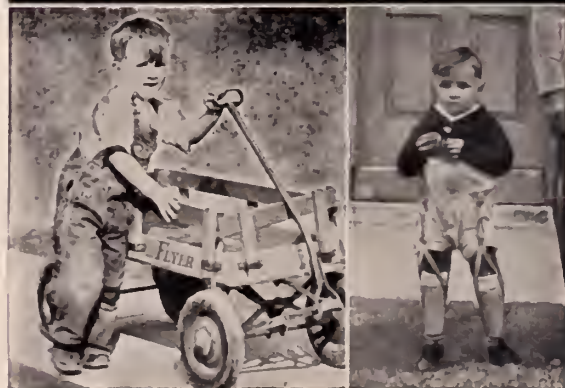
The subjects covered by Doctor Becker will include "The Psychoneurotic Patient", "Clinical Heart Disease", "Renal Vascular Diseases", "The Anemias and Leukemias", "Allergy and the Hypersensitivity Diseases", "Endocrinology", "Gastro Intestinal Diseases", "Hepatic and Biliary Disorders", "Preventive Medicine and Infectious Diseases", and "Antibiotics and Chemotherapy".

Reports from the first three circuits are very gratifying to the committee. The attendance has been excellent and the lectures are being received by the attending physicians with great enthusiasm.

Announcements have been mailed to all physicians in the fourth circuit and those who have not mailed their enrollments in to the Postgraduate Committee should do so at once in order that their names will be on the rolls for the first lecture.

Doctor Becker is now abstracting the current literature in Internal Medicine and such abstracts are published in this issue of the Journal. The Committee feels that this is a worth while service on the part of Doctor Becker and will be of much value to the busy practitioner.

"... he runs and plays again!"



Hanger Prosthetic Appliances have brightened the present and the future for many amputees. For example, Weaver Nolt says: "My son, Lloyd, was a pathetic figure in a big hospital bed after his legs were amputated because of an accident. Today it's a big and wonderful world again as he gets along so wonderfully on his Hanger Legs. He walks without any help, and runs and pushes his wagon all over the farm. That other day is just a hazy memory, and we are so pleased things are so different than we expected."

HANGER ARTIFICIAL LIMBS
BRACES ARCH SUPPORTS TRUSSES
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NEW MEMBERS OF O.S.M.A.

The following physicians became new members of the Oklahoma State Medical Association during January:
 Frank E. Flack, M.D., Woodward
 Don McNeal, M.D., Taloga
 Ray E. Spence, M.D., Maysville.

AUXILIARIES URGED TO MARK DOCTOR'S DAY

All auxiliaries in the Southern States are urged to plan some appropriate observance honoring their physicians on or near March 30, Doctor's Day. Observance of Doctor's Day creates an excellent opportunity for some favorable publicity for the medical profession, an O.S.M.A. Auxiliary representative pointed out.

In past years some auxiliaries have sponsored parties for their local Medical Societies; others have sent flowers to each doctor's office and still others have provided a flower for each doctor to wear in his lapel on that day. At the meeting of the Southern Auxiliary in Cincinnati in 1949, the red carnation was adopted as the official flower for Doctor's Day.

March 30 was adopted in 1934 by the Southern Auxiliary as Doctor's Day with the object being to honor the medical profession and pay tribute to the doctors. This date was selected in memory of that March 30 in 1842 when Dr. Crawford Long successfully used the first anesthesia. The first observance was held in Atlanta, Georgia in 1935, and since that time most of the southern states have observed the day.

SCHEDULE

COMING MEETINGS IN POSTGRADUATE INSTRUCTION, UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

1. March 20, 21 and 22, 1950. Three day course in General Pediatrics. Guest lecturer William L. Bradford, M.D., Professor of Pediatrics, at the University of Rochester School of Medicine, Rochester, New York, and Nelson Ordway, M.D., Professor of Pediatrics, Louisiana State University, New Orleans.
2. April 6, 7, and 8, 1950. Post-graduate course in Surgery. Guest instructor Champ Lyons, M.D., Professor of Surgery, Medical College of Alabama, Birmingham, Alabama.
3. April 17 and 18, 1950. Two day course in Pediatrics — "Care of the Premature Infant". Guest speaker Harry H. Gordon, M.D., Professor of Pediatrics at the University of Colorado School of Medicine, Denver, Colorado.
4. April 24-30, 1950. Tour of five centers in the state in conjunction with the State Association for Infantile Paralysis. A course in Diagnosis and Management of Poliomyelitis will be given in each center.
5. June 1, 2, and 3, 1950. Three day course of Cardiology. George C. Griffith, M.D., Cardiologist from Los Angeles, California, will be the guest speaker.

Place these dates on your calendar and plan to attend these courses at the University of Oklahoma School of Medicine.

A BIG TIME-SAVER FOR EVERY DOCTOR



This handy booklet for new mothers was "built to doctors' orders". It contains blank forms for filling in your instructions and formulas.

It provides a permanent case-history record. A memo will bring you a sample...or as many as you want for your daily practice... without obligation.

Many doctors are prescribing "Daricraft Homogenized Evaporated Milk". It is always uniform, safe, sterilized, easy to digest, and high in food value and minerals. Daricraft contains 400 U. S. P. units of Vitamin D per pint.



PRODUCERS CREAMERY CO., SPRINGFIELD, MO.

PHYSICIANS, STUDENTS APPROVE O.U. PRECEPTORSHIP PROGRAM

ONE YEAR TRIAL BRINGS INQUIRIES

With the fourth group of senior medical students now serving their preceptorships, the response to the program has been gratifying both from the standpoint of the students and their preceptors, reports Dean Homer F. Marsh of the University of Oklahoma School of Medicine.

At a recent meeting of the preceptors, all expressed the desire to stay on the program. Eighteen preceptors are now serving and there is a waiting list in the dean's office of O.S.M.A. members who have made application to participate.

1950 medical school graduates initiated the program which began June 1, 1949. Purpose of the preceptorship program, lengthening the senior year to 44 weeks, is to stimulate the students' interest in and acquaintance with practice in the rural areas of the state. The plan was used successfully first in Wisconsin 20 years ago and several other states are using variations of the Wisconsin system. Kansas is slated to begin a similar program this year.

Several students already have stated they intend to go back to some small community instead of a city to practice, which indicates the program is achieving part of its goal, Dr. Marsh pointed out. Citing the fact that most rural communities offer opportunities not excelled in metropolitan areas, Dr. Marsh explained that many of the students had not expected to see the large practices, modern hospitals and equipment they have found in the smaller towns.

Students are expected to make reports every two weeks giving a resumé of the cases they have seen and at the end of their preceptorship period, each student's general comment and criticism of the plan under his individual preceptor is submitted in writing.

The preceptors are in turn notified if changes suggested by the student are approved by the Preceptorship Committee. Preceptors are also required to make reports to the medical school giving their evaluation of the students.

Preceptors, who have been established as acting members of the medical school staff, serve without pay and are responsible for providing the students they are teaching with board, room, and laundry of uniforms during the 11 week period.

Students are not treated as assistants to the physicians and are not allowed to receive any payment from preceptors, associate preceptors or hospitals participating in the program. The plan is described by Dean Marsh as one in which the student observes but does not practice medicine although he is expected to accompany his preceptor on calls, observe each patient and the treatment given the patient, and witness operations performed during the period.

Interest in the program on a national and international basis was shown recently when the State Department featured the University of Oklahoma's preceptorship plan on its Voice of America, Crossroads, U.S.A. program. The broadcast was in two parts, the first outlining the "what" and "why" of the program and reviewing its accomplishments; the second phase of the program featured an interview with a student who presented his views of the preceptorship system.

FORTY STATE HOSPITALS APPROVED BY A. C. S.

Forty Oklahoma hospitals have been approved by the American College of Surgeons, reports Malcolm T. MacEachern, M.D., Chicago, ACS director.

They are: Ada—Valley View Hospital. Ardmore—Hardy Sanitarium. Bartlesville—Washington County Memorial Hospital. Claremore, Clinton-Indian Hospital, Western Oklahoma State Hospital, and Western Oklahoma Tuberculosis Sanatorium. Cushing—Masonic Hospital. El Reno—Federal Reformatory Hospital.

Enid—Enid General Hospital and St. Mary's Hospital and annex. Fort Supply—Western Oklahoma Hospital. Fort Sill—Fort Sill Station Hospital. Guthrie—Benedictine Heights Hospital. Lawton—Kiowa Indian Hospital. McAlester—Albert Pike Hospital and St. Mary's Hospital.

Muskogee—Muskogee General Hospital and Oklahoma Baptist Hospital. Norman—Central Oklahoma State Hospital and Ellison Infirmary. Oklahoma City—Bone and Joint Hospital, Mercy Hospital, St. Anthony Hospital, Oklahoma Hospital for Crippled Children, University Hospital, Wesley Hospital, and Will Rogers Memorial Hospital.

Pawnee—Pawnee-Ponca Indian Hospital. Ponca City—Ponca City Hospital.

Shawnee—ACH Hospital, Shawnee Indian Sanatorium and Shawnee City Hospital.

Stillwater—Stillwater Municipal Hospital. Sulphur—Oklahoma State Veterans Hospital. Tahlequah—William W. Hastings Indian Hospital.

Talihina—State Tuberculosis Sanatorium and Talihina Indian Hospital.

Tulsa—Hillcrest Memorial Hospital and St. John's Hospital.

PEDIATRICS COURSES AVAILABLE TO DOCTORS

Open to any interested physicians, three guest lecturers will present post graduate courses in pediatrics at the University of Oklahoma School of Medicine in March and April.

William L. Bradford, M.D., Professor of Pediatrics at the University of Rochester School of Medicine, Rochester, New York, will speak on general pediatrics and Nelson Ordway, M.D., Professor of Pediatrics, Louisiana State University, New Orleans, will discuss "Congenital Heart Disease," March 20, 21, 22.

April 17 and 18, a post graduate course in "Care of the Premature Infant" will be held. Guest lecturer will be Harry H. Gordon, M.D., Professor of Pediatrics at the University of Colorado School of Medicine, Denver.

CARDIOLOGY COURSES TO BE HELD IN JUNE

Lectures, panel discussion groups, and cardiac clinics are planned on the three day program of the post-graduate course in cardiology at the University of Oklahoma School of Medicine June 1, 2, and 3.

Physicians are urged to place this date on their calendars as the three days will be devoted to study of fields of interest to both the cardiologist and the physician doing general work. George C. Griffin, M.D., cardiologist at the Los Angeles County Hospital, will be guest lecturer.

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."¹

To achieve the greatest accuracy in dosage and at the same time to preserve the full activity of the leaf, the total cardioactive principles must be isolated from the plant in pure crystalline form so that doses can be based on the actual weight of the active constituents. This is, in fact, the method by which Digilanid® is made.

Digilanid contains all the *initial* glycosides from *Digitalis lanata* in crystalline form. It thus truly represents "the great powers of the plant" and brings "the doses of it to the greatest possible accuracy".

Clinical investigation has proved that Digilanid is "an effective cardioactive preparation, which has the advantages of purity, stability and accuracy as to dosage and therapeutic effect."²

Average dose for initiating treatment: 2 to 4 tablets of Digilanid daily until the desired therapeutic level is reached.

Average maintenance dose: 1 tablet daily.

Also available: Drops, Ampuls and Suppositories.

1. *Withering, W.*: An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.*: Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. 209: 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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LACTOGEN + WATER = FORMULA

1 level tablespoon
(40 Cals.)

2 fl. ozs.

2 fl. ozs.
(20 Cals. per fl. oz.)

LACTOGEN®
CLOSELY APPROXIMATES
BREAST MILK

Advertised to
the Medical Profession only.



MEDICAL SOCIETIES AROUND THE STATE

Tulsa County

R. Lyle Motley, M.D., Associate Professor of Medicine at the University of Tennessee School of Medicine, Memphis, was guest speaker at the Tulsa County Medical Society January 23. Dr. Motley spoke on "The Importance of Neurogenic Pain to the Surgeon and Internist."

Caddo-Grady

Speaking briefly on the activities of the State Association, Dick Graham, Executive Secretary, addressed the members and Auxiliary of the Grady-Caddo County Medical Society at the Jan. meeting.

Pittsburg County

Rev. W. H. Alexander, Oklahoma City, was guest speaker at a January meeting of the Pittsburg County Medical Society. Members of the Latimer County Society also attended the meeting.

Lincoln County

Members of the Lincoln County Medical Society met in Stroud recently for the annual election of officers. H. T. Baugh, M.D., Meeker, was elected president; E. F. Hurlbut, M.D., Meeker, was named vice-president; and D. H. Collins, M.D., is the secretary-treasurer.

Washita-Kiowa

The Washita-Kiowa County Society and members of the auxiliary had a joint meeting at Sentinel January 10. The March meeting of the society will be held at Hobart. William K. Ishmael, M.D. and John F. Kuhn, M.D., Oklahoma City spoke on modern treatment of arthritis at the January meeting.

Kay-Noble

Harold G. Muchmore, M.D. and Robert F. Redmond, M.D., of the staff of the University of Oklahoma School of Medicine, were guest speakers at the Kay-Noble County Medical Society meeting in Ponca City recently. "A Review of Anti-Histamines" was the subject of their lectures.

Logan County

Newly elected officers of the Logan County Medical Society are Phillips R. Fife, M.D., president; R. F. Ringrose, M.D., vice-president; and J. E. Souter, M.D., secretary-treasurer.

Okmulgee-Okfuskee

M. L. Peter, M.D., was installed as president of the Okfuskee-Okmulgee Society during January. S. B. Leslie, Jr., is secretary-treasurer. Principal speaker at the meeting was A. B. Carney, M.D., Tulsa.

Choctaw-McCurtain-Pushmataha

Dentists, pharmacists and physicians in the tri-county area attended the January 10 meeting of the Choctaw-McCurtain-Pushmataha County Medical Society. The program was presented by Thomas D. Howard, M.D., Robert Head, M.D., both of Idabel, and Dean F. Werner, M.D., Broken Bow.

Jackson County

Onis G. Hazel, M.D., Oklahoma City, discussed "Diseases of the Skin" and William K. Ishmael, M.D., Oklahoma City, spoke on "Use of the Newer Hormones in Arthritis" at the Jackson County Medical Society meeting recently.

Stephens County

1950 officers of the Stephens County Society are W. R. Cheatwood, M.D., Duncan, president; Jack Gregston, M.D., Marlow, vice-president; and Fred Taylor, M.D., secretary-treasurer.

Garfield-Kingfisher

Members of the Garfield-Kingfisher County Medical Society elected Charles J. Roberts, M.D., Enid; Raymond G. Jacobs, M.D., vice-president; Roscoe C. Baker, M.D., re-elected secretary. Basil A. Hayes, M.D., Oklahoma City, spoke on the socialized medicine plan in England as it operates today.

Pottawatomie County

J. M. Byrum, M.D., spoke on Medical Ethics and W. M. Gallaher, M.D., led the discussion when the Pottawatomie County Medical Society met January 18.

Oklahoma County

The Oklahoma County inaugural party for 1950 officers was held January 14 at the Oklahoma City Golf and Country Club. New officers installed are: John F. Kuhn, M.D., president and Ralph Smith, M.D., secretary.

ANNOUNCEMENTS

OKLAHOMA ACADEMY OF GENERAL PRACTICE. March 27-28. Sievers Hotel. Muskogee.

OKLAHOMA STATE MEDICAL ASSOCIATION. June 5-6-7, Municipal Auditorium, Oklahoma City.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30-31, Nov. 1-2, Biltmore Hotel, Oklahoma City.

A.M.A. June 26-30, San Francisco.

CORPS EXAMINATIONS FOR MEDICAL OFFICERS. May 15, 16, 17. Applications must be received no later than April 17, 1950.

POSTGRADUATE ASSEMBLY IN ENDOCRINOLOGY. Roney Plaza Hotel, Miami Beach, Florida, April 3-8. Sponsored by the Association for the Study of Internal Secretions and the American Diabetes Association. Application on your letterhead with check for \$75 payable to the Association for the Study of Internal Secretions should be sent to Henry H. Turner, M.D., Secretary-Treasurer, 1200 North Walker, Oklahoma City.

AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS. April 22-29, Sherman Hotel, Chicago.



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HAVE YOU HEARD?

Evelyn M. Rude, M.D., formerly with the student health service at the University of Oklahoma, has been employed as physician in Saudi, Arabia with the Arabian-American Oil Company.

Basil Hayes, M.D., Oklahoma City, spoke to the Midwest City Lions Club on "Shall We Have Socialized Medicine".

W. F. Lewis, M.D., Lawton, was guest speaker at the Apache Rotary Club.

N. H. Cooper, M.D., Ponca City, was principal speaker at a recent Stillwater Chamber of Commerce luncheon.

P. J. Devaney, M.D., was elected president of the Sayre Golf and Country Club for the coming year.

L. E. Crick, M.D., Britton, discussed the recent polio drive at the Britton Kiwanis Club.

E. C. Mohler, M.D., and *Edwin C. Yeary, M.D.*, have recently opened new offices together in Ponca City.

O. H. Cowart, M.D., Bristow, is chairman of the main street improvement committee of Bristow.

H. K. Speed, M.D., Sayre, discussed "New Medicines" at the Sayre Rotary Club meeting recently.

C. H. Guild, M.D., Shidler, is a member and secretary-treasurer of the Shidler Improvement Association.

Jack Murray, detail man in the Oklahoma City territory for 15 years with Squibb has returned to his native state of Tennessee. Taking his place is Bob Frieresen, formerly of Wichita.

J. B. Lonsden, M.D., Granite, recently celebrated his 49th year in the practice of medicine. He has practiced in Granite since 1913.

C. Riley Strong, M.D., El Reno, told the Business and Professional Women's Club of that city that "compulsory health insurance is not insurance but politically controlled medicine, proposed by the federal security administration".

John Simon, M.D., Alva, spoke to the Alva Rotary Club on health education recently.

Bill McCurdy, M.D., Purcell, is the new president of Purcell's chamber of commerce and agriculture.

Mark D. Holcomb, M.D., Enid, discussed the treatment of atomic injuries at an Optimist Club meeting there.

Edward T. Cook, Jr., M.D., Anadarko, was guest speaker at a P-TA meeting.

Robert W. Gibson, M.D., has joined his father, *R. B. Gibson, M.D.*, in practice in Ponca City.

Roy L. Fisher, M.D., Frederick, attended a meeting of the American College of Surgeons in El Paso February 12.

John R. Lawson, M.D., Clayton, has recently been featured in articles in the Daily Oklahoman and Grit as Clayton's most useful citizen.

D. W. Branham, M.D., Oklahoma City, who has been ill for several weeks is now back at his practice.

Coyne Campbell, M.D., Oklahoma City, announces that the name of the Coyne Campbell Sanitarium has been changed to the Spencer Road Sanitarium and that the offices of the Coyne Campbell Clinic have been moved to 2920 Classen Blvd., Oklahoma City.

Robert W. Head, M.D., Hugo, has been appointed district superintendent of health for Choctaw and McCurtain counties.

Dick Graham, O.S.M.A., Executive Secretary, spoke on "What Will Socialized Medicine Mean to You?" at the social studies group of the Tulsa A.A.U.W. Jan. 5.

PHYSICIANS VIEW SURGERY VIA TELEVISION AT MEDICAL SCHOOL

Television was used for the first time for teaching purposes at the University of Oklahoma School of Medicine, Saturday, January 28, 1950, at the annual postgraduate instruction program of the Oklahoma City Obstetrical and Gynecological Society.

A hysterectomy performed by Albert H. Aldridge, M.D., Chief Surgeon at the Woman's Hospital, New York City, N. Y., guest lecturer, was televised from the operating suite at University Hospital to the auditorium in the Nurses Quarters, where approximately 130 doctors attending the course were watching. The response was enthusiastic, with several of the visiting physicians stating they saw much more of the operation than previously had been possible from the operating suite galleries.

The television broadcast was made by the WKY-TV mobile unit. The office of Postgraduate Medicine, University of Oklahoma School of Medicine cooperated in the program.

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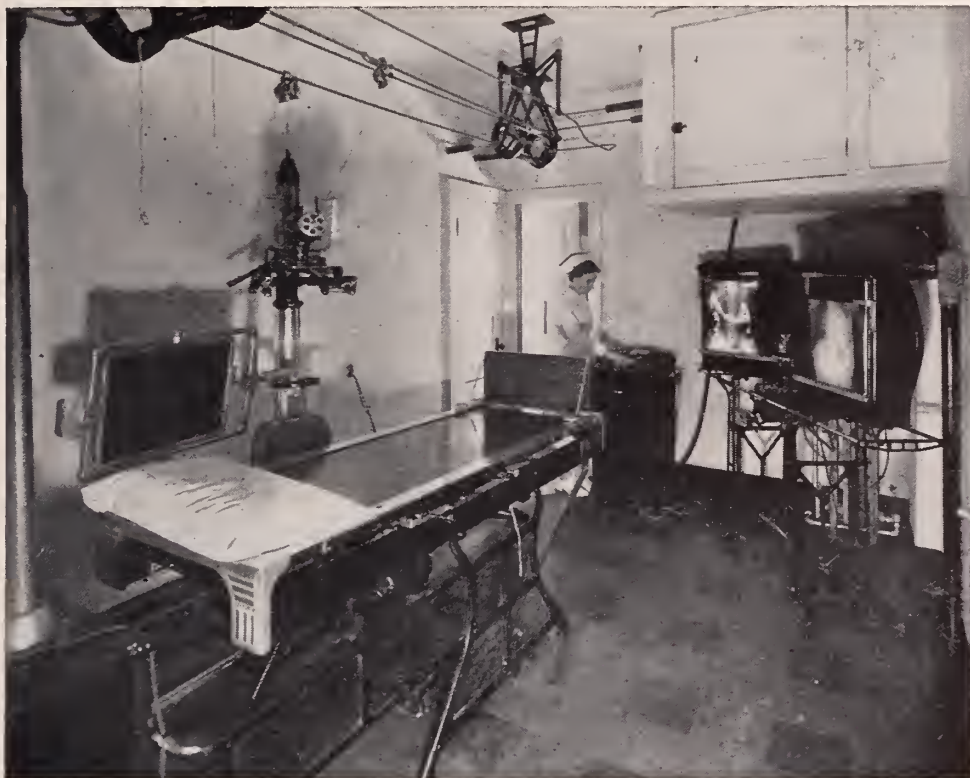
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(From Our Early Files of Editorial Notes—Personal and General)

CREEK COUNTY MEDICAL SOCIETY met at Bristow February 13, at the Roland Hotel, with a good attendance.

DR. EARL D. MCBRIDE, Oklahoma City, held a crippled children's clinic at Clinton on February 7, under the auspices of the Clinton Rotarians.

THE OKLAHOMA CENTRAL MEDICAL ASSOCIATION recently re-organized at Enid, will meet again at Enid on April 2; Dr. Paul Champlin, Enid, is Secretary.

OSAGE COUNTY MEDICAL SOCIETY met at Pawhuska February 2 at the Municipal Hospital. Dr. Fred A. Glass, Tulsa, being the principal speaker of the evening.

THE AMERICAN COLLEGE OF SURGEONS district convention for 1926 will meet at Tulsa, it was decided at the Little Rock meeting in February; the district consists of the states of Oklahoma, Arkansas, Texas and Missouri. Dr. Leroy D. Long, Oklahoma City, was elected President, Dr. Fred S. Clinton, Tulsa, Secretary, and Dr. Horace Reed, Oklahoma City, Councilor, for the district.

OBITUARIES

J. S. FULTON, M.D. 1866-1950

J. S. Fulton, 84-year-old pioneer Oklahoma physician, died January 25 at his home in Atoka.

Dr. Fulton established his practice in 1891 after graduating from the Louisiana University Medical School. He was born in Grayson County, Texas, and attended public schools there.

Dr. Fulton was president of the Indian Territory Medical Association in 1893 and later became president of the Oklahoma State Medical Association. He was president of the Atoka school board for 12 years and headed the Atoka Chamber of Commerce 20 years. He had been a Mason more than half a century. Dr. Fulton, who had received the O.S.M.A. 50 year pin, celebrated his 50th year in the medical profession in 1940. The

Southeastern Medical Society gave him a bronze plaque at a community-wide luncheon in his honor.

R. W. STONER, M.D. 1898-1950

R. W. Stoner, M.D., died at his home in Checotah following a long illness.

Dr. Stoner, who had practiced in Checotah 12 years, was born May 15, 1898. During World War II, he served overseas as a captain. He was made a life member of the Oklahoma State Medical Association in 1949. He was a member of the Checotah Post of the American Legion and took an active interest in the work of the local Methodist church of which he was also a member.

Survivors include the widow of the home, one daughter, his mother, three sisters and one brother.

DO YOU KNOW?

That this issue of the Journal carries the first in a series of abstracts of medical literature in recent publications abstracted by Robert M. Becker, M.D. Dr. Becker is the instructor in the postgraduate course in Internal Medicine. This month's abstracts appear on page 128.

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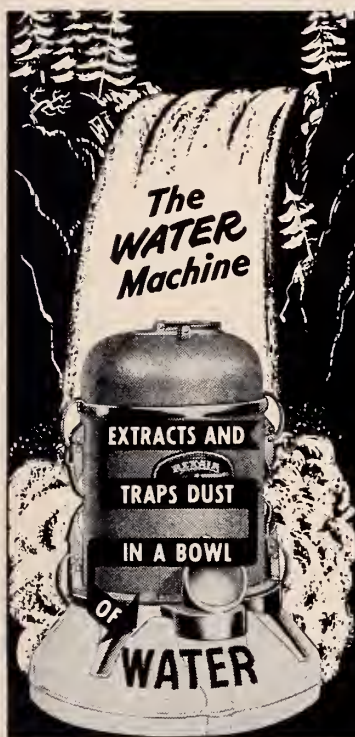
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BOOK REVIEWS

A TEXTBOOK OF SURGERY, edited by Frederick Christopher, B.S., M.D., F.A.C.S., Evanston, Illinois, fifth edition, W. B. Saunders Company, 1949.

With the publication of the fifth edition a fine surgical reference book has been made even finer. All fields of modern surgery are covered in a very excellent fashion by recognized authorities on each subject throughout the United States and Canada.

Many new sections have been added to this edition. These are all written by currently established authorities. The text has been made absolutely modern. However, debatable or incompletely tried methods are not included. It is truly surprising the wealth of material included in this one volume. Etiology, pathology, and diagnosis have been properly dealt with and correct surgical treatment has been carefully described.

Of special importance in this fifth edition are the sections that have been revised by new authors as follows: Chemotherapy of Surgical Infections, by Dr. John S. Lockwood, of Columbia University; Pathology and Repair of Fractures (Murray), by Dr. Paul C. Coloma, of the University of Pennsylvania; Fractures of the Femur (Murray), by Dr. Carl E. Badgley, of the University of Michigan; Operative Treatment of Fractures (Magnuson), by Dr. James K. Stack, of Northwestern University; Injuries and Surgical Infections of the Eyes and Adnexa (Gifford), by Dr. Derrick Vail, of Northwestern University; Tumors of the Stomach (Balfour), by Dr. John M. Waugh, of the Mayo Clinic; Anomalies of the Small Intestine and the Bile Duets (Ladd), by Dr. Thomas H. Layman, of the Harvard University; Aseptic Surgical Technic (Weeks), by Dr. Frank L. Meleney, of Columbia University; Management of the Surgical Diabetic Patient (Wilder), by Dr. Randall G. Sprague, of the Mayo Clinic.

This surgical text is a complete and easy to use as can be found today. It is highly recommended to the practicing surgeon, the resident and intern, and the medical student.—Everett B. Neff, M.D.

NURSING—AN ART AND A SCIENCE. Margaret A. Tracy, R.N., A.B., M.S. and Collaborators. Third Edition, 625 pages, 183 illustrations. St. Louis: C. V. Mosby Company, 1949. Price \$4.00.

This practical text book of "Nursing—An Art and a Science" now appears in its third edition. It has been revised and shows marked improvement.

The length of the book has been reduced from 754 pages to 625 pages by the elimination of the detailed "Procedure" section which appears in previous editions at the end of the textbook and which was a duplication of material presented in the preceding chapters.

The text still maintains its simplicity and appeal to the beginning students. There are 48 new illustrations which in some instances replace; and in others supplement those used in previous editions and which reflect the improvement in method and equipment that has occurred in the past decade.

The developments in medicine and surgery during the past years which have profoundly affected the care of patients and which are reflected in this edition are early ambulation and the increasing use of chemo-

therapy. More attention, also, has been given to posture and body mechanics which is of great value to the student nurse.

On the whole the book is very good. The newer significant improvements in procedures are included in this revised edition. The text is complete in that it covers the field of the course in a very interesting and attractive presentation.

Some features which are lacking in this textbook and which are found in many nursing art texts are the spiritual care of the patient, which is so essential, and thought provoking questions and suggested activities at the end of chapters which are beneficial and helpful to students.

The reviewer feels that this book is very valuable and an excellent guide for the instructor and students alike.—Sister M. Pancratia, R.N., B.A., Associate Director of Nurses, St. Anthony Hospital, Oklahoma City, Oklahoma.

THE PHYSIOLOGY OF THOUGHT. Harold Bailey, M.D., F.A.C.S. New York. The William-Frederick Press. 1949. \$3.75.

What an interesting adventure and how nebulous our knowledge of the physiology of thought. Neuro-psychiatry is a very imperfect science. As a premise for this brief review we quote from the author's preface: "When we began to study thought, it never occurred to us that the subject could become as comprehensive as our investigations have shown it to be. The unfolding of the various relationships existing between thought and other phenomena have proved as surprising as they have been unexpected. It was only after we had repeatedly challenged our own theories that we were compelled to accept many of our deductions and conclusions as accurate explanations of various mental processes . . . For the most part our subject has been one which mainly concerns a study of the nervous system. This study embraces both the normal and the abnormal, and includes both the nervous system in general as well as that more highly specialized branch which concerns mental function."

As may be surmised from these remarks, there is much in the book not purely physiological and the more specific discussions having to do with the physiology of thought are largely speculative. But this should not deter the reader who is interested in thought and who is not? Naturally any discussion of this subject is largely speculative but this fact should encourage continued study and research. The anatomy of the brain is well known but its function as related to thought is in need of unrelenting exploration. The author is to be commended for bringing this stimulating discussion to the attention of the reading public.

To mention only a few of the chapters should be sufficient to arouse reader interest. "The Meaning of the Mind," "Thought and Concentration," "Subconscious Thought," "Dormant Memories," "Dreams," "Perceptions and Apperceptions," "Emotion and Thought."

There are many others equally intriguing.

—Lewis J. Moorman, M.D.

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Hamblen, E. C.: Some Aspects
of Sex Endocrinology
in General Practice,
North Carolina M. J.
7:533 (Oct.) 1946.



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MEDICAL ABSTRACTS

SELECTED FROM RECENT LITERATURE ON INTERNAL MEDICINE

ETIOLOGY AND MANAGEMENT OF THE HEMORRHAGIC DIATHESES. Doan, C. A., Dept. of Medicine, Ohio State University Med. School, Columbus, Ohio. *Annals of Int. Med.* 31:967, December, 1949.

Dr. Doan covers a complex clinical field in a lucid and sensible manner. He reviews up to date concepts of coagulation mechanisms. In his diagnostic approach to the bleeding and/or purpuric patient he divides them into the two large groups, those with an adequate number of circulating platelets and those with abnormally low or absent circulating platelets. (This can be simply done by examining the stained peripheral blood smear when facilities for more elaborate platelet counts are not available — R.M.B.) When the latter condition thrombocytopenia exists three circumstances must be considered, namely (1) primary hypersplenism, (2) secondary hypersplenism, and (3) bone marrow disturbance. In primary hypersplenism the spleen, according to Doan, serves as a trap taking many platelets out of circulation, and with the injection of adrenalin the spleen contracts, forcing platelets into the circulation. (Dameshek and others feel the important mechanism in primary hypersplenic thrombocytopenia is one of depression of platelet formation in the megakaryocytes of the bone marrow — R.M.B.) In primary hypersplenic thrombocytopenia, the spleen is usually not palpable. Treatment is splenectomy. In secondary hypersplenic thrombocytopenia, Doan points out that the hypersplenic effect in removing platelets from the circulation can be secondary to Hodgkin's disease, Gaucher's disease, lymphomas, leukemias and passive congestion of the spleen. Splenectomy is indicated if the hemorrhagic diathesis is of a degree to be endangering the life of the patient. Thrombocytopenias associated with primary bone marrow disturbances are listed as those due to mechanical crowding out of megakaryocytes from the bone marrow by leukemia or metastatic cell proliferation, by idiopathic bone marrow aplasia or due to depression of all bone marrow elements by poisons such as benzene, sedormid, X-Ray, radium, etc. or by severe nutritional disturbances. In any case he points out that examination of the bone marrow is important to be fully able to recognize its activity, whether replaced by malignant cells or megakaryocytes increased in number (hypersplenism).

As factors to be sought for when the bleeding patient has adequate circulating platelets (non-thrombocytopenic purpura) the author discusses the following:

1. Plasma coagulation defects — his concept of normal stages in coagulation is: Thromboplastinogen (anti-hemophilic globulin) + platelet enzyme (thromboplastinogenase) → thromboplastin; thromboplastin + prothrombin + Ca → thrombin; fibrinogen + thrombin → fibrin.

2. Hypoprothrombinemia, which may be present in hemorrhagic disease of newborn, obstructive jaundice, hepatic insufficiency, intestinal disease interfering with adequate absorption of Vit. K, inadequate Vit. K intake. Recommended therapy consists of synthetic derivatives of quinine, one of which is menadiolone, U.S.P., 1 mgm orally daily.

3. Hyperheparinemia (Allen) which may be followed by cytotoxic therapy like X-Ray irradiation, nitrogen mustard, etc. In vitro heparin tolerance tests may be set up. Recommended therapy — Protamine 0.5-2.0 mgm/Kgm body wt. in 50-75 cc N saline IV each 24 hrs. or toluidine blue 1-4 mgm/Kgm body wt. given similarly.

4. Anti-hemophilic globulin deficiency — (hemophilia) a thromboplastinogen deficiency in the plasma of hemophiliacs, present in normal human whole blood or plasma. Replacement therapy by fresh whole blood, fresh plasma, freshly frozen or by opihized plasma transfusions from normal donors. A Plasma Fraction I of Cohn containing larger amounts of this anti-hemophilic globulin may be obtained from the Nat'l. Amer. Red Cross.

5. Fibrinogenopenia — occurring as a congenital and familial disease, becoming apparent secondary to trauma; deficient fibrinogen supplied by fresh whole blood or plasma transfusions.

The other type of hemorrhagic diathesis associated with normal platelets discussed by Dr. Doan is that due to capillary defects, discussing the familial hereditary telangiectasias, hereditary pseudohemophilia; secondary capillary defects due to Vit. C deficiency, to mechanical factors like hypertension. Anaphylactic mechanisms are discussed in relation to purpura, producing platelet depletion by megakaryocytic damage in the bone marrow or producing direct capillary damage to vascular endothelium. He gives a word of warning with reference to using very small doses of a suspected purpura producing antigen, suggests therapeutic trial with anti-histamines or histamine desensitization. He concludes with a brief discussion of purpura of embolic and meningococcemic origin, and excessive uterine hemorrhage as a manifestation of a generalized hemorrhagic diathesis, suggesting in this situation the use of ergotrate grs. 1/320 every 4-12 hrs. for not more than 8 consecutive doses without a 24 hr. rest period; obstetrical pituitrin or pitocin 1 amp. IM q 4 h as necessary; Ca chloride or gluconate 10 cc 10 per cent sol. IV; testosterone 25 mgm or stilbestrol 5-10 mgm daily; or correction of a hypothyroid state with desiccated thyroid.—Robert M. Becker, M.D.

ROLE OF ANEMIA IN EXP. PROD. OF HEART BLOCK & AURICULAR FIBRILLATION IN THE DOG. Horlick, L., Surtshin, A., *American Heart Journal*, 38:716 November, 1949.

Anemic dogs were found to be much more prone to develop auriculo-ventricular blocks and auricular fibrillation when given injections of acetylcholine in doses much smaller than doses of acetylcholine required to produce same changes in dogs with normal hemoglobin. Authors feel that anoxic myocardium from anemia renders myocardium more sensitive to acetylcholine. (Ed. — Clinical implications are obvious, that anemia in a patient can not only produce well recognized cardiac damage with congestive failure or coronary insufficiency but also may precipitate A:V conduction defects and auricular fibrillation due to increased sensitivity of myocardium to naturally present acetylcholine.)—Robert M. Becker, M.D.

(Continued on Page 131)

OKLAHOMA ACADEMY OF GENERAL PRACTICE

The Oklahoma Academy of General Practice is proud to announce the program for the Second Annual Meeting to be held in Muskogee, Oklahoma, March 27th and 28th, 1950. The meeting will be in the Severs Hotel, Muskogee's largest and finest. Each member of the Oklahoma State Medical Association will receive a copy of the program with a form for requesting hotel reservations. The Academy feels that many of you will again take advantage of the opportunity to attend.

PROGRAM

MONDAY, MARCH 27, 1950

- 9:00- 9:30 Phil Thorek, M.D., Chicago, Surgery
"The Acute Abdomen"
- 9:35-10:05 Forrest P. Baker, M.D., Talihina, Tuberculosis
"Recent Developments in the Treatment of Pulmonary Tuberculosis"
- 10:10-10:40 William C. Mixson, M.D., Kansas City, Mo., Obstetrics & Gynecology
"Problems in the Early Diagnosis of Cancer in the Uterine Cervix"
- 10:45-11:15 Franklin D. Murphy, M.D., Dean, Univ. of Kansas Med. School
"The Training of the Complete Physician."
- 11:20-11:50 N. G. Alcock, M.D., Iowa City, Iowa, Urology
"Tumors of the Adult Kidney"
- 12:15- 1:30 Roundtable Luncheon
- 1:45- 2:15 Phil Thorek, M.D.
"Intestinal Obstruction"
- 2:20- 2:50 James G. Hughes, M.D., Memphis, Pediatrics
"The Management of Convulsive Disorders in Infancy and Childhood"
- 3:00- 5:00 Business Meeting
- 7:00- 8:00 Social Hour
- 8:00 Dinner Dance — E. C. Texter, M.D., President, American Academy of General Practice, Speaker "Close Relationship Between the Patient And the Family Doctor"

TUESDAY, MARCH 28TH

- 9:00- 9:30 W. K. Ishmael, M.D., Oklahoma City, Rheumatism
"Newer Developments in the Field of Rheumatic Diseases."
- 9:35-10:05 Moorman P. Prosser, M.D., Oklahoma City, Psychiatry
"Treatment of the Common Neuroses by the General Practitioner"
- 10:10-10:40 James G. Hughes, M.D., Memphis
"The Treatment of Diarrhea in Infancy"
- 10:45-11:15 John E. McDonald, M.D., Tulsa, Orthopedics
"Treatment of Fractures of the Foot and Ankle"
- 12:00- 1:30 Roundtable Luncheon
- 1:45- 2:15 William C. Mixson, M.D., Kansas City
"The Management of Bleeding in Late Pregnancy."
- 2:20- 2:50 N. G. Alcock, M.D., Iowa City
"Changing Aspect of the Scheme of Socialized Medicine"
- 2:55- 3:25 Franklin D. Murphy, M.D.
"Realism in Medical Education"

POSTGRADUATE ASSEMBLY IN ENDOCRINOLOGY INCLUDING DIABETES

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INFECTIOUS MONONUCLEOSIS. (Editorial) Houck, George H., *Am. J. Med.* 7:699, December, 1949.

In reviewing his experience and the literature on infectious mononucleosis, the author points out the involvement of most all organ systems by the basic pathologic lesion of the disease, namely a perivascular infiltration of normal and abnormal lymphocytes, formed in situ from other cells of the reticulo-endothelial system. It is generally agreed to be an infectious disease, in all probability due to a virus but no definite etiologic agent has yet been isolated. By involving many organ systems the clinical picture may be one of a myocarditis, interstitial nephritis, benign lymphocytic meningitis, encephalitis or Guillain-Barre syndrome. Almost every case of moderate severity has significant hepatic involvement; pulmonary infiltrates may resemble viro or atypical pneumonias. The serologic presence of antibodies (agglutinins) to sheep red cells (Paul Bunnell test) appears sometime during the course of the disease, usually early.

Treatment is primarily supportive especially with hi protein hi CHO diets to protect the liver cell. (Aureomycin has been reported beneficial and may be tried. —Ed.) As the author points out "The disease always impairs vital organs, frequently incapacitates and occasionally kills."—Robert M. Becker, M.D.

AUREOMYCIN IN THE TREATMENT OF TULAREMIA.

Ransmeier, J. C., Price, H. J., and Barnes, Z. B., Jr., Emory University School of Medicine, Atlanta, Ga., *Am. J. Med.*, 7:518 October, 1949.

The authors report striking improvement in three cases of tularemia following oral aureomycin therapy, dosages ranging from 2.0-6.0 Gms. daily given in divided doses every six hours, the larger doses used initially. One of the cases was of the pneumonic type, the other two were the ulcero-glandular type, one of the latter requiring surgical drainage. From literature available, aureomycin is more effective than streptomycin in controlling experimental tularemia in mice. It is pointed out, that since the mortality in tularemia without specific treatment is only 7.4 per cent, that caution must be exercised in avoiding overenthusiasm of an apparently curative drug when tried on just a few cases.—Robert M. Becker, M.D.

USE OF LITHIUM SALTS AS A SUBSTITUTE FOR

SODIUM CHLORIDE. Talbot, J. H., Dept. of Med., of Buffalo School of Medicine, Buffalo, N.Y., *Arch. Int. Med.*, 85:1, January, 1950.

The author cites his experiences with lithium salts, dating back to 1930, when he used them clinically and experimentally in animals, investigating acid-base balance in patients with metabolic disorders and in patients with gouty arthritis, and more recently as a salt substitute. His rational study points out that symptoms attributable to lithium intoxication were more likely attributable to salt depletion with low serum Na values induced by rigid Na Cl restriction with simultaneous energetic use of mercurial diuretics. Patients with supposed lithium intoxication, presenting characteristic symptoms and manifestations of the salt depletion syndrome, namely anorexia, nausea, vomiting, peripheral vascular collapse, mental confusion, etc., a picture not unlike that of a crisis of adrenal-cortical insufficiency. Symptoms which could possibly be attributable to lithium intoxication were found in patients taking massive doses of the lithium salts, none being found in association with serum lithium concentrations below 1.0 mEq.

—Robert M. Becker, M.D.

USE OF PARAAMINOBENZOIC ACID IN DERMATOMYOSITIS AND SCLERODERMA. Larafonetis, C. J. D., Curtis, A. C., Gulick, A. E., Dept. of Med., Univ. Hospital, Ann Arbor, Mich., *Arch. Int. Med.* 85:27, January, 1950.

Authors began using large doses of PABA in diffuse collagen diseases like disseminated lupus erythematosus and dermatomyositis when it was noted that sensitivity to sunlight was encountered in patients receiving sulfonamide compounds, and PABA has been known as an antagonist to sulfa compounds. Present report cites definite, and in some cases, remarkable improvement in four cases of scleroderma, one case of dermatomyositis and one case of mixed scleroderma and dermatomyositis. Some photographs in the paper are indeed convincing of improvement, but spontaneous remissions especially in dermatomyositis are well known. Dosages of Na or K p-aminobenzoic acid ranged from 1.5-3.0 Gms. every 2-3 hrs. for total doses of 24 Gms. in 24 hrs. at first, reducing dosage to 1.0-2.0 Gms. 3 or 4 times a day as maintenance. The PABA was supplied by Merck & Co., and Wyeth Inc.—Robert M. Becker, M.D.

CARDIAC DYSFUNCTION IN HYPERTHYROIDISM.

STUDY OF 810 CASES. Griswold, D., Keating, J. H., Dept. of Med., St. Lukes Hosp., New York, N. Y., *Am. Heart Jour.* 38:813 December, 1949.

810 cases of hyperthyroidism were reviewed; patients with auricular fibrillation or cardiac insufficiency noted on admission were classified as thyrocardiacs, and 12.5 per cent of the 810 fell into this category; the other 87.5 per cent were classed as nonthyrocardiacs. Symptoms had existed an average of 13.1 months in thyrocardiacs, an average of 10.8 months in the nonthyrocardiacs. The age of thyrocardiacs averaged 51 years, of nonthyrocardiacs 41 years. 52 per cent of the thyrocardiacs had associated cardiovascular disease, compared with 13 per cent of the non thyrocardiac controls; 48 per cent of the thyrocardiacs had no demonstrable organic heart disease. There was no correlation between severity of the thyrotoxicosis and presence of auricular fibrillation or cardiac insufficiency; 65 per cent of the thyrocardiacs with congestive failure had auricular fibrillation. The authors note that once a thyrocardiac was compensated following treatment of his hyperthyroidism, that he is no more likely to suffer similar episodes than a nonthyrocardiac.

—Robert M. Becker, M.D.

AUREOMYCIN TREATMENT OF PNEUMOCOCCIA PNEUMONIA. Gocke, T. M., Collins, H. S., Finland, M., Thorndike Memorial Laboratory, Boston, Mass.

This paper presents the results of treatment of 33 consecutive patients with pneumococcal pneumonia with oral and parenteral aureomycin. Excellent results were obtained, on a par with those that would be expected with penicillin. Major reduction in fever occurred during first 12-24 hours in 27 patients, during first two days in 31, symptoms improved as fever dropped. Complete clearing of pulmonary lesion was noted by the end of two weeks in all but three patients. All strains of pneumococci found were sensitive to aureomycin. There were two deaths among the 33 treated; one was in critical condition when aureomycin was started, the other occurring unexpectedly during the time the patient was showing favorable response as far as his pneumonia was concerned. Toxic gastrointestinal effects were noted in six of the 33 patients but were not severe enough to interfere with therapy, seven patients had large and bulky stools, occasional diarrhea.

—Robert M. Becker, M.D.

50 and 3

YEARS TREATING ALCOHOL AND DRUG ADDICTION

In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

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THE JOURNAL

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OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

"I GO A-FISHING"

Of all people in the service of mankind, physicians need periodic diversion and relaxation. They need a type of leisure not to be found in the pursuit of organized and commercialized sports.

Long before St. Peter said, "I go a-fishing" and prepared the way for the record of his act in the Book of books this antidote for the wear and tear of life's daily routine was well known and regularly employed.

Always there have been two kinds of fishermen. One represented by the rugged, suntanned, salty seamen who supply the easy going intelligentsia and the socially elite with cod, clam, and crab, lobster, scallops and sole. While they are woefully underpaid in the goods of this world, they are wonderfully blessed by the beauties of sea and sky never to be found in the clubs where their fishes fry. Douglas in "The Big Fisherman" makes clear the fact that though fishing for gain, they develop an intimate acquaintance with the God of the turbulent seas, "sunshine, rain and harvests".

But this screed is concerned with another kind of fisherman. Namely, those who go for fun and unconsciously reap material values. The tired physician who is unacquainted with piscatorial virtues and reluctant for fear of public opinion, may take courage in the fact that United States presidents burdened with the affairs of the nation have employed this time tried method of securing the stabilizing influence of contemplative surcease. Among them are to be found the names of Cleveland, Coolidge and Hoover. They were drawn close to God through the ways of water, sun and sod. Grover Cleveland was so mellowed by nature, his tolerance found expression in that delightful monograph, "In Defense of Fishermen".

In an "Etchers introduction" to Schal-dachs beautiful book, Fish, John Taylor Arms says, "It may well be that all good men are not fishermen, but certain am I that all fishermen are good men." This phil-

osophy makes every good physician eligible to walk with Izaak Walton beside peaceful streams with

"Here and there a lusty trout

And here and there a grayling".

Here is an opportunity for genuine pleasure without "repentance like a sting". Henry Vandyke says "human intercourse is purified and sweetened by flowing murmuring water." Robert Louis Stevenson, so long an invalid and so much with doctors, said, "There is no music like a little river's. And lastly Sir it quiets a man down like saying his prayers."

Physicians who must help people meet the most trying experiences known to man should have the peace and poise that comes through communion with nature. Walton observed that "the very sitting by the river side is not only the quietest and fittest place for contemplation, but will invite the angler to it." Such philosophizing at the riverside is a "moderator of passions," not equalled by any other therapeutic potion. Certainly this talk of sitting on the bank suggests a can of worms, but for the benefit of orthodox anglers it should be known that even the Master Izaak Walton said, "The last fish I caught was with a worm." Our own John Burroughs fished the Neversink with a worm. Grover Cleveland and Bliss Perry were likewise guilty. In the light of these facts there is no excuse for a physician, whether he be a piscatorial neophyte or a veteran with the rod. This is a sugarcoated, life saving, psychosomatic therapeutic agent available to all who are fatigued and frustrated by the stress and strain of a restless world.

Organized and commercialized recreation cannot take the place of fishing in remote places where genuine leisure sweetens the soul while the world goes by. The reader should not forget that this quiet, joyous experience does not preclude the exercise of creative skills. The author of "Days on the Nepicon" says, "I never witnessed any

branch of outdoor recreation affording greater pleasure than to watch the finished artist place his flies so delicately and accurately that the trout regarded it as a compliment and considered it obligatory to rise and strike and repent."

Such recreation broadens the physician's interest in humanity, sharpens his perception, augments his skills, increases his tolerance and enlarges his usefulness.

The season is on — why not go a-fishing?

STANDARDS IN MEDICINE

Apropos the current accusation that physicians in this country have purposely made medical education very difficult in order to hold down the number of medical graduates, the following quotation¹ from the *Boston Medical and Surgical Journal* of January 30, 1850 is of particular interest:

"The London College of Physicians and Surgeons have decided, that, for the future, the candidates for their fellowship shall pass an examination in Greek, Latin, mathematics and French."

1. The *New England Journal of Medicine*. February 2, 1950.

A VOICE IN THE WILDERNESS

Those who may wonder if doctors are opposed to compulsory health insurance because of their own personal interests will be interested to know that state and territorial health officials have gone on record as opposed to government health insurance. Here is an expression of considered judgment on the part of physicians who are already working on fixed salaries and not fearing that the government is going to rob them of material rewards but rather that government medicine will reduce their efficiency and lessen their opportunities for service in the prevention of illness. We quote Dr. Valdo A. Getting, Commissioner of Public Health for Massachusetts:

"The United States has the highest standard of health of any country in the world, as the health officers said in their resolution. They wanted to maintain this high standard. They saw that the plans for government health insurance were poorly developed and made little provision for prevention of sickness. They felt that prevention comes first rather than waiting until people are sick and then paying the heavy bills for medical service for preventable illness. The state health officials were not anxious to expand their departments for the sake of having big departments. They were more anxious to do their job right."

Q STANDS FOR QUESTION

These days doctors have many questions which work up a fever, send chills up and down the spine and hopeless headaches to the seat of reason. But this one doesn't come out of Washington and it's not bureaucratic in origin. It's Q fever, a relatively new disease. It was first reported by Derrick in 1937. In his opinion it first appeared in Australia. Numerous outbreaks have been reported in the western part of the U.S., perhaps the most notable in Los Angeles where more than 200 cases have been observed.

In the Archives of Internal Medicine December, 1949, Brawley and Modern¹ have given a fairly comprehensive review and report of 12 cases. They indicate that Burnett of Australia discovered the causative agent and it was named *Rickettsia C. burneti* by Derrick. The mode of transmission has not been determined. The causative agent is a minute gram negative organism. It occurs both intra and extracellularly.

The incubation period is not known. Perhaps many cases go undiscovered but those reporting for medical care have manifested the symptoms of an acute infection. The onset, usually acute, may be insidious.

The common symptoms are malaise, chills, fever, anorexia, headache, pain in the chest and vague general aching. Some observers have reported photophobia, diarrhea, joint pains, nausea and vomiting as initial symptoms. Cough has been reported in about half of the cases. In most cases reported the symptoms have been out of proportion to physical signs. The duration of the fever has been reported as running one to two weeks.

It is thought pneumonitis is one of the most common manifestations but the physical findings are often unremarkable even when pneumonitis is present. Apparently blood counts are not of diagnostic significance. The white count in the 12 cases reported by Brawley and Modern ranged from 3600 to 14,200. They reported Roentgen ray evidence of pneumonitis in 50 per cent of their cases. The sedimentation rate is elevated. The complement fixation test is considered diagnostic. Dairy cattle and other animals are considered reservoirs for the causative agent.

At the present time therapy rests chiefly upon the relief of symptoms. The antibiotics and sulfonamides have been employed without specific action. Aureomycin seems to be the most promising.

1. Brawley, R. W., and Modern, F. W. S. Q Fever in a Veterans' Hospital. *Archives of Internal Medicine*. 84:6:917-932 (December) 1949.

DUST AND DISEASE

Current reports of chest disease, probably fungus, from the dust of the desert carries us back to the "curse of King Tut" which may have been chemical rather than purely psychological as suggested by some students of history.

Not as a scientific solution but as a stimulus to speculation and to show there is nothing new under the sun you are carried back to the "most desolate region in all Egypt" and under the lamp of archaeology you read from Kinnaman's "Diggers for Facts",

"The ancient Egyptians were perhaps the greatest chemists that the world has ever known, especially along the line of poisons. It seems a very good thing that some of their knowledge has been lost. If it were known today, there is no telling what would happen!

"It seems most probable that all the artifacts of the tomb, the walls and floors of the apartments were sprayed with a very fine dust powder, invisible to the naked eye, odorless, and tasteless — POISON. When the fresh air rushed in after some three thousand years, this dust filled the tomb, and it was some time before it cleared. The effect of breathing the dust was a form of pneumonia; but it would not 'break,' nor could it be typed. Of the twenty-two men who entered the tomb, two are still living. The deaths have spread over fifteen years. The last to pass was Dr. Carter (Howard Carter, archaeologist) himself in February, 1939. Each man was afflicted with what appeared to be pneumonia, and heart trouble; but would not yield to treatment. If this theory be correct, then psychology must pass from the picture. There is a curse *written* on the tomb, and heavy penalties called down upon the head of anyone desecrating and despoiling it."

MEDICINE PERENIALLY UNDER FIRE

All this agitation about medicine is nothing new. It runs throughout the ages: from 1950 BC in Mesopotamia, to 1950 Washington, D. C.; from the shifting sands of the Euphrates to the grass clad shores of the Potomac; from Nebuchadnezzar to President Truman; from Hippocrates, the father of medicine, to Oscar R. Ewing, who, God save us, wants to be father of us all, thus giving every doctor an oath.

Through it all there has never been any excuse for the medical profession to depart

from the truth. Even political pressure can be met with nothing as effective as the plain truth about medicine's unfailing service to humanity. It has weathered the rise and fall of all governments and all civilizations. If left alone it will help save and stabilize our own, if subjected to the rule of bureaucracy it will witness the inevitable decline and yet survive to help build another civilization according to its wont.

A NEW FRONT, OR WE GO OUT THE BACK DOOR

It is unfortunate that physicians who in times past had the love and support of all the people must now employ non professional experts in public relations. Always physicians have known how to handle the sick. But now with more well people than ever before they must learn how to gain the respect and support of the well.

Physicians must change their method of approach. It doesn't require a psychologist to see what is going on. Without the obvious tactics of a labor union, physicians must learn how to present a united front against the organized politically minded groups who would destroy liberty and free enterprise. Each member of the State Medical Association should decide how he can best serve the cause and he should stand ready to help preserve our way of life even at the cost of time and money. Physicians must cultivate the public, they must become educators, unobtrusively they must inform the people as to the value of medical services now available and the danger of government control.

The State Association should establish a speakers' bureau and a training school for prospective speakers where knowledge and methods necessary to cope with current problems may be acquired.

Any physician who refuses to do what he can in the execution of such plans will consciously or unconsciously become a traitor to his people and his profession.

The present threat of radical changes in medical care is serious. Even the sick can afford to wait while the physicians lead the fight in their behalf.

NEW O.S.M.A. MEMBERS

Two physicians became new members of the Oklahoma State Medical Association in February. They are:

John F. Gray, Jr., M.D., First National Bank Bldg., Tulsa. (Tulsa County)

John X. Blender, M.D., Cherokee (Alfalfa County).

SCIENTIFIC ARTICLES

BLEEDING IN EARLY PREGNANCY*

W. CARL LINDSTROM, M.D.
TULSA, OKLAHOMA

Bleeding is one of the most common, serious complications seen in the first half of pregnancy. In a modest obstetrical practice 44 patients have bled from a total of 392 patients seen, since January 1947. If this can be accepted as average, one woman out of nine bleeds sometime in the first four and one-half months of her pregnancy.

Any discussion of bleeding in early pregnancy must of necessity primarily concern abortion, because this is by far the most common cause of all. There is a wide variance of thought in the profession, as to the proper methods for the care of the patient who is aborting or threatening to abort. Some believe that most abortions are the result of nature taking care of her mistakes and that they should not be interfered with. Others believe that there is a definite fetal salvage value, and that it is great enough to warrant careful, and if needed, prolonged treatment of the threatening abortion. There is some statistical data in the literature to support either claim.

Other than abortion, the causes for bleeding in early pregnancy may be, menstruation after conception, cervical erosions, polyps, rupture of a varix any place in the birth canal, extra uterine pregnancy, fibroids, carcinoma of the cervix, and hydatidiform mole.

Menstruation after conception is not an uncommon phenomenon. Many patients will designate a date as the last normal menstrual period and the findings will more nearly coincide with a date a month earlier. Careful questioning will reveal that the period referred to was definitely abnormal. It is not infrequent that patients will report a blood stained vaginal discharge as late as the date of the third missed period, usually very transient in nature, and without other symptoms. Women report at times the menstrual molimen recurring each month throughout their pregnancy, and this sensation will be found to coincide with the time the patient should have menstruated. There seems to be little doubt that true

menstruation can occur during pregnancy. It is the rule in the maccus monkey. The deciduas do not fuse until the fifth month and ovarian function is possible in pregnancy as proved by instances of superfecundation, menstrual molimenia already mentioned and findings at autopsy on pregnant women. The diagnosis of this cause of bleeding is by inference usually, because the bleeding coincides with the date of an expected period and will usually cease promptly with bed rest.

Cervical erosions in my experience, are a common cause for bleeding. This is especially true if there has been some decidual change in the erosion. This bleeding often follows some trauma, as coetus, douches, or a pelvic examination. The bleeding is seldom severe and the bleeding points are readily seen on visualization of the cervix. Little treatment is necessary as a rule, though the erosion may be lightly cauterized.

Uterine polyps may cause very troublesome bleeding. They more commonly bleed without trauma. They certainly undergo decidual changes earlier than an erosion will. The highly vascular polyp will then bleed readily and rather profusely. Again, visualization of the cervix will frequently reveal the polyp. Light cauterization is usually necessary to control the bleeding.

Rupture of a varix in the birth canal may be located by speculum examination and certainly should be considered in the presence of other varices in the canal. Treatment of this cause of bleeding must of necessity be completely individualized. Ligation of the bleeding point, chemical cauterization, and topical applications of coagulants are methods that may control this bleeding. Packing of the vagina for pressure is not indicated in pregnancy.

Extra uterine pregnancy must of course be considered in all these patients bleeding in the very early months of pregnancy. The historical findings are of great importance in suspecting this complication. The presence of an adnexal mass of exquisite tenderness, with findings consistent with an early pregnancy, the bleeding warrants further

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association May 17, 1949.

investigation to complete the diagnosis of an ectopic pregnancy.

Fibroids, especially if intracervical, may cause bleeding, and are frequently seen on speculum examination. The bleeding points can usually be controlled with chemical or actual cautery. Other uterine fibroids will be considered with the discussion of abortions.

Carcinoma of the cervix is an infrequent complication of pregnancy, and of course may cause bleeding. Suspicious lesions are seen on visualization of the cervix and there is no contraindication to performing biopsies of such lesions. On proof of the diagnosis, the carcinoma must be treated irrespective of the pregnancy. This is especially true in early pregnancy, as the chance of getting a viable baby, even at the expense of the mother's life, is very poor.

Hydatidiform mole is at best not easy to diagnose. This condition should be suspected when there is irregular bleeding throughout the pregnancy, rapid growth and globularity of the uterus, abdominal pain, a soft elastic feel to the uterus, absence of fetal body or small parts, absence of movement, symptoms of toxemia, and the general evidence of illness. Vaginal metastasis may be found. The reaction to the Ascheim-Zondek of the Friedman test is more strongly positive than in normal pregnancies. The treatment for the mole is to empty the uterus as soon as the diagnosis is established. A very careful followup of these patients is important to detect the possible development of a chorioepithelioma.

Because of the frequency of abortion every patient bleeding in the early months of pregnancy must be considered as threatened with abortion until proved otherwise. This is as it should be, but it does not relieve the attendant of his responsibility of ascertaining the patient's true condition. Certainly the least one can do is to inspect the cervix. This simple procedure may clarify the problem immediately, and thus relieve the patient's apprehension or confirm her suspicions.

While such an examination may not readily diagnose other specific causes, it may definitely settle the question of threatened abortion and serve as a guide to treatment.

In discussing the problem of threatened abortion, it is well to consider some of the causative factors. This, to some extent may determine the prognosis of the pregnancy. These factors may be considered under the following headings; mechanical, endocrine,

and disease of the ovum.

The mechanical factors which may threaten abortion are; simple and fixed retrodisplacement of the uterus, ovarian tumors, and uterine tumors.

Simple retrodisplacement of the uterus infrequently causes trouble. At times however, the uterine enlargement fills the pelvis and the sacral promontory prevents the escape of the large uterus from the pelvis. In an attempt to dislodge itself, contractions begin of sufficient force to break the placental attachment, and bleeding follows. In this series of 44 bleeding patients, two have been seen who fit into this category. One of these patients aborted. The other has remained pregnant and the pregnancy is progressing satisfactorily. The patient who aborted has since carried a pregnancy to term without difficulty. Prior to the second conception, the uterus was replaced in anterior position and held with a pessary. The pessary was left in place until the uterine enlargement was sufficient to prevent its being retrodisplaced again.

Fixed retrodisplacement is a much more common cause for abortion. Adhesions about the uterus of sufficient density to restrict the enlargement of the uterus will stimulate contractions, and the subsequent detachment of the pregnancy and usually its loss, in spite of all attempts to prevent it. Pregnancies that go to term in patients with this condition frequently present very serious problems in the last trimester and in labor. In this series, there is one patient who it is believed fits in this category. She has lost two pregnancies at approximately 14 weeks, and is again pregnant. She is under treatment as will be discussed, and is now approximately 13 weeks pregnant, and having no trouble as yet. Her pregnancies have been so rapid that removal of the suspected adhesions have not been possible.

Ovarian tumors may cause abortion. Adhesions about the tumor may incarcerate the uterus in the pelvis, and the tumor by its size alone may produce the same problem. Rupture of cysts, especially dermoids may cause local peritonitis, which may stimulate the uterus to empty itself. None of the reported in this series were in this category.

Uterine tumors, the most common of which is the fibroid, may mechanically stimulate the uterus to contractions. This is especially true of deep intramural or submucous fibroids. Apparently, under the stimulus of the pregnancy, the tumors grow and protrude into the uterine cavity enough to

act as a foreign body and cause the uterus to empty itself. Though not included in this series, I have seen one patient who had repeated abortions for which no cause could be ascribed. At the time of surgery for another condition, a deep intramural fibroid was found and removed. Following this, she carried a pregnancy to term without difficulty, and has since had a hysterectomy for multiple fibroids. At no time prior to surgery could a fibroid be suspected by the usual examinations. Subserous fibroids, especially if located in the lower portion of the corpus, may grow enough under the stimulation of pregnancy to prevent the uterus from escaping from the pelvis. The result is hard contractions and some bleeding from placental detachment. There is one patient in this series who had a threatened abortion due to this cause who went to term uneventfully after the uterus raised out of the pelvis. Another case is suspected of having a submucous fibroid on the basis of the findings at the time of curettage following her abortion. Further diagnostic study is to be done to determine whether or not this was the cause.

Endocrine factors that are considered the basis of bleeding or threatened abortion are thyroid deficiencies, and progesterone deficiencies. The latter probably is primarily due to anterior pituitary deficiencies.

Thyroid deficiencies though minimal are thought to be a definite factor in threatened abortions. This is largely by inference. Patients who have had one or more abortions elsewhere have been found to have low basal metabolic rates, and the administration of thyroid has improved their sense of well being and in many instances followed by completely uneventful pregnancies. In this series it has been impossible to point out the exact results from the administration of thyroid, as it is routine to determine the basal metabolic rates of all pregnant patients and give thyroid to those who have low rates. It seems to be logical that good results may be expected in the low rate groups when one sees the good results in many bleeding disturbances in non pregnant patients from the administration of thyroid and no other treatment.

Progesterone deficiencies are the most common cause of bleeding in endocrine group of patients. The deficiency may be suspected from the body type of the patient. They are usually short in stature, especially short legs as compared to the trunk, small breasts and have male hair dis-

tribution. Their menstrual cycle is usually normal and sterility does not seem to be a problem in this group of women. The patient with the hyperirritable uterus is considered to be in this group. This is a very commonly seen complication. The normally pregnant uterus should not contract with sufficient intensity to cause pain. Many patients, though, do have painful uterine contractions in the early months of pregnancy. It is my belief that to ignore these painful contractions is to encourage the patient to bleed or threaten to abort. Patients, who have previously lost pregnancies, will volunteer the information that this is the way the previous miscarriage started. Because of this all patients who report painful contractions are treated until they are completely controlled. Many of the patients in this series have had some treatment but are not included in the 44 cases of bleeding or threatened abortion. It is of interest that threatened or actual premature labor is very frequent in these patients with the hyperirritable uterus. In this series 15 patients are in the category of uterine hyperirritability. Four pregnancies were aborted, five were delivered of viable babies one of which was premature, six are still pregnant and three of these are at or past the time of viability.

Another common form of progesterone deficiency which may be the cause of bleeding and/or threatened abortion, is apparently due to an inadequate secretion of the hormone. The patients do well until near the third month of pregnancy when it is believed the secretion of progesterone is primarily from the placenta rather than the corpus luteum. Near this time the patient begins to bleed and cramp and present a difficult problem to get under control. Seven patients in this series are believed to be in this category. Of the seven, five aborted and the remaining two were delivered at term.

Diseases of the ovum are undoubtedly responsible for the bleeding and loss of many pregnancies. As mentioned earlier many workers in this field believe nearly all abortions are on this basis. They report that there is a greater proportion of abnormalities from these patients who do go to term. This is not agreeable to all however. Falls and co-workers report over 1000 cases of threatened abortion and premature labor delivered at or near term following therapy without an increase in abnormalities among the infants.

Diseases of the ovum are manifest in

many ways. The improperly formed fetus or the diseased fetus is one of the manifestations of diseases of the ovum. Faulty implantations and non fatal errors of placenta formation are also due to diseases of the ovum. This is fully discussed in the standard texts. Thus it is felt that a certain percentage of the patients in this group have a salvage value. The treatment to be outlined herein has yet to prevent the loss of a definitely abnormal or dead fetus. There has been some delay in the expulsion but none have been prevented. Thus, it is felt that there is no interference with nature correcting her mistakes. Fifteen patients in this series were believed to be in this category. Ten of these were aborted, four were delivered at term, and one is now pregnant.

The treatment used in this group of patients has been based on the premise, that by controlling the contractility of the uterus in threatened abortion for a sufficient time, the natural processes in the pregnancy will correct the defects and allow the pregnancy to continue. This has been applied in this series, and found to be adequate in a reasonable number of cases. It has also been observed that in the event of the death of the pregnancy, the treatment does not prevent the expulsion of the products of the gestation though the expulsion may be delayed. No ill effects have been observed from this delay in final loss of the pregnancy while a few pregnancies thought to be surely lost have progressed to term with good babies delivered.

The usual procedure followed in treating these patients is as follows. Those who have had previous abortions are given vitamin 'E' in dosages of 300 mgm. daily. Basal metabolic rates are determined on all patients, and those in the low rate group are given thyroid extract to the point of tolerance. Vitamin 'C' has been suggested in the care of these patients because it may reduce the bleeding tendencies. This has not been followed in this group of patients, though all patients are given a poly-vitamin capsule containing the daily minimum requirements of all the vitamins. Any complaints of cramping and or spotting are immediately treated with products of the corpus luteum. This substance is repeated as frequently as is indicated by the patient's response. An attempt is made to keep the therapy on a semi-ambulatory basis, though frank bleeding demands absolute bed rest in conjunction with the above mentioned treatment. This treatment, as outlined, is

continued as long as is necessary to determine the outcome of the pregnancy.

Progesterone apparently has a dual action. The first is a hormone that produces the secretory changes in the endometrium, and the other a hormone that relaxes smooth muscle and inhibits uterine muscle to contract. In the group treated the first half of this period progesterone was used and with adequate results. However, the relaxing quality of the progesterone used seemed to vary considerably and the secretory hormone was thought to be of no particular value in this problem. One group, who used endometrial biopsies to determine the fate of threatened abortions, could see no beneficial effect on the endometrium of these patients studied who had received some progesterone therapy. Another group reported the effectiveness of an aqueous extract of the corpus luteum* insofar as the relaxing qualities were concerned. This product has been used in this series for approximately the last half of the time covered in this report and with very satisfactory results in producing the desired relaxation of the uterus. There is no question that the product contains the relaxing substance or hormone. The evidence given in the work of Falls et al can readily be observed in the office without resorting to elaborate studies. The uterus of many of these patients is palpably contracted and following the administration of the substance will relax and remain quiescent for several hours to several days. Patients, who are obviously expelling an early pregnancy, can be relieved of the contractions for several hours, though as mentioned earlier the eventual expulsion is not affected. So called spastic dysmenorrhea can be temporarily relieved with the same substance. This product has several definite advantages over the progesterone products in treating this problem. It is relatively inexpensive, it can be given intravenously as well as intramuscularly and large doses can be given. I have used as much as 20 cc in a single intravenous dose. There have been no reactions observed in the use of this product.

Estrogenic substances, especially the synthetic products, have been used in a similar manner in this same problem. I have had no experience in their use.

Vitamin 'E' has been used very successfully in animals in preventing loss of pregnancies. Its value in man has not been so clearly established, and there is much difference of opinion as to its value. Its use is

apparently not harmful and on the basis of the animal work may be of value. There is no contraindication to its use.

Morphine and its products have been used rather extensively in treatment of threatened abortion and early bleeding. Morphine enhances the contractility of the uterus in early pregnancy, thus should be avoided in these patients. In late pregnancy morphine definitely inhibits uterine contractions.

Since January, 1947, 44 patients developed the complication of vaginal bleeding in the first half of pregnancy and required treatment. This represents approximately 12 per cent of all pregnancies seen in this period. Of the 44 patients, 20 miscarried, 12 before treatment could be instituted; (seen first with inevitable abortion or failed to report the bleeding soon enough.); three proved to be ectopic pregnancies; 12 delivered viable babies; nine are now pregnant and under treatment. There have been no abnormalities among

the infants, there were no fetal deaths among those going to viability. The fetal salvage justifies the effort involved and is extremely gratifying.

SUMMARY

1. Some causes of vaginal bleeding in early pregnancy have been discussed.

2. Many of the causes of threatened abortion have been discussed and a method of treatment presented.

3. Fetal salvage of 27 per cent of all pregnancies threatening to abort has been attained by the method of treatment presented. Excluding those patients still pregnant the fetal salvage has been 35 per cent.

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*Lutein—(Hynson, Westcott & Dunning).

COMMON COMPLAINTS OF PREGNANCY*

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TULSA, OKLAHOMA

Although I have had thirty years experience in the management of pregnancy I know of no magic and have no secrets. I am just going to tell you what we are doing at the present time for a few of the common complaints that arise during an average pregnancy. Many of the common complaints of pregnancy have no direct relationship to the pregnancy. Of course, many times a pregnancy will aggravate these complaints, if they already exist. We must realize too that most of these complaints are interlocked and interwoven with each other and that there is no specific cause and therefore no specific treatment for most of them.

I am convinced that the women who are in the best condition generally have the fewest complaints. Our first step is to give the patient a complete and thorough examination. The examination that we give these patients now includes a basal metabolism

test, complete blood counts, RH factor, waserman, urine examination, blood pressure, chest X-ray, throat and chest examination and pelvic examination. We write down everything that needs attention and try to correct all of the deficiencies as soon as possible. If this can be done early, it is surprising how few complaints will develop in the average patient.

The first and by far the most common complaint of early pregnancy is nausea and vomiting. I am constantly impressed with the fact that this complaint is becoming less frequent as years go by. It has been over 10 years since I have found it necessary to interrupt a pregnancy because of hyperemesis. It has been over six years since I have hospitalized a patient because of this complaint. This, to my mind, bears out the statement that I just made that healthy patients are less apt to have complaints. Getting the patient in good, general health as soon as possible is of primary impor-

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tance.

Our present management of hyperemesis is as follows: We give the patient a prescription for luminal tablets, grains one and one-half, number 12 with instructions to break the tablets into two pieces, take a half before arising in the morning and another half at bedtime. In extreme cases this can be increased to one whole tablet if necessary. In addition to this, we give large doses of Vitamin B complex intravenous every three or four days until they are completely relieved. These two things take care of the larger majority of the cases of hyperemesis. If, however, there is a persistent nausea, we add 20 cc. of 50 per cent glucose to the Vitamin B complex and give it intravenously. This can be repeated every two or three days until relief. If there is a marked increase in the amount of secretion in the mouth and throat, we have found elixir of donnatal, one teaspoon twice a day will often dry up this hypersecretion and this helps to relieve the nausea. Donnatal contains hyoscyamus and atropine with $\frac{1}{4}$ grain of phenobarbital.

The next complaint that is usually called to our attention is discharge. A superficial erosion of the cervix can be safely cauterized early in pregnancy, but, I would not do a radical cauterization for fear of producing abortion. We urge the patients to take vinegar douches every day throughout the prenatal period. For *Trichomonas* I have found nothing better than Devegan tablets. These can be inserted in the vagina after douching and will control most of the cases of *Trichomonas*. For the *Monilia*, we use douches with tincture of iodine, one teaspoon to one quart of water instead of the vinegar. This followed by a Devegan tablet. Most of these cases are mixed infections.

Pain in the lower quadrant in the early months of pregnancy is usually due to the presence of the corpus leutum. This symptom usually disappears with the disappearance of the corpus leuteum. Another cause of pain is varicosities in the broad ligament. This is more common in multiparas. A simple word of explanation will usually allay the patient's fears about this pain. However, it is important in all cases to rule out any possible infection in the appendix or the kidneys. We often prescribe aspirin or phenaphen tablets to give the patient some temporary relief. Pain in the lower back and pelvis and legs during the latter months of pregnancy is usually relieved by a prop-

erly fitted maternity corset. I do not urge the patients to purchase corsets unless they are quite uncomfortable because I think that the corset serves no useful purpose except for comfort.

Cramps in the calf of the leg and in the feet are usually due to calcium deficiencies and can be relieved by increasing the calcium by mouth or in extreme cases giving a dose or two of calcium intravenously. We use calcium gluconate for the intravenous because of its safety. Severe uterine cramps will often respond to the same treatment. All of our patients take at least two nutritive capsules a day.

Frequency and dysuria the latter months of pregnancy in the absence of kidney or bladder infection will often be relieved by a properly fitted corset. If we find pus in a catheterized specimen, we will give Mandelamine, two tablets after meals and at bedtime for ten days with instructions to leave off all citrus fruits while taking the Mandelamine. They are also instructed to discontinue all other medicine, such as calcium during the Mandelamine treatment.

Swelling in the vulva, legs and feet is often relived by a corset. Generalized swelling usually means water retention and calls for a cut in the intake of salt, and of course, careful investigation for other signs of early toxemia.

Phenaphen is our choice for the relief of ordinary headaches of pregnancy. These tablets contain aspirin, phenobarbital, belladonna and phenacetin. They give soothing relief to most nervous headaches.

Insomnia, the latter months of pregnancy is a very distressing symptom to many patients. We use a half a tablet of luminal at bedtime. It is apparently not harmful to the baby.

For constipation during pregnancy, we use agarol, two teaspoons at bedtime. If this is objectionable, we prescribe bilron capsules, one or two at bedtime. Of course, there are many other safe laxatives.

For heartburn we have found gellusil liquid most effective. Two teaspoons before breakfast, between meals and at bedtime for a few days will be appreciated.

The most distressing complaint of most patients after the baby is born is after pains. If the uterus is allowed to become distended with blood it requires severe cramping to expel the blood clots. If, however, the uterus is kept contracted, there will be very little cramping because there are no blood

clots. For this purpose, we use ergotrate tablets by mouth every four hours for the first 24 hours and then twice a day for six to eight days. We have found that ergotrate will often relieve headache and backache that occurs post-partum. Ergotrate hastens involution and checks excessive bleeding.

Painful stitches can be best prevented by careful suturing. During 30 years, I have tried the various types of episiotomies and I am convinced that a midline episiotomy is easier to repair and gives far less post-partum discomfort than any other type. Heavy sutures placed through penetrating the skin and tied tightly are very painful. I do not approve of tension sutures of any kind. We use triple 0 chromic cat gut. The stitches are all subcutaneous or subcuticular. These stitches should not be tied tight. There are no stitches to remove. Our patients have very little pain. Early ambulation helps. A little diathene ointment on the perineum and around the rectum helps to relieve the painful hemorrhoids and any irritation that might occur along the line of incision.

To prevent painful and engorged breasts in patients who are not going to nurse the baby, we use stilbestrol 25.0 mg. one tablet a day for 10 days. This does not work

on every patient, but, it is of some help and the patient feels that you are trying to do something to help this situation.

I know of no satisfactory treatment for the cure of cracked, bleeding nipples if the baby is allowed to nurse. There is apparently not time enough between nursings for the nipples to heal and these cases will almost invariably become infected if they are allowed to go on. So, if the nipples become cracked, we usually discontinue nursing until they are healed.

Inability to void is best treated by allowing the patient to go to the bathroom and sit on the stool. This does less harm than repeated catheterizations.

Our patients are always checked at the end of two weeks and if the uterus is not contracting down as fast as it should, the patient is given more ergotrate. At that time she is allowed to start her douches again.

At the end of six weeks the patient is given a complete final examination. If the uterus is not in perfect position, the patient is given a pentothal anesthetic and the uterus is placed in normal position and any erosion or damage to the cervix is taken care of by cauterization.

MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

"Is Cancer a Danger to Your Child?" — by Groff Conklin — *Woman's Home Companion*, March, 1950.

This is another of those sensational-scare type articles so frequently published in lay publications. However, most of them do a little good even though the public drives the physician distracted, because the parents are more conscious of the fact that it can happen, and if only one life is saved, it is worth some heckling. The six rules that are given to parents in this article are excellent.

"Eight New Tests for Cancer" — by J. D. Rateliff — *Today's Woman*, March, 1950, page 42.

Have you ever read an article with dynamite wrapped up in it? If you have or haven't read this one, you can hear the fuse sizzling. All the new tests and ideas of cancer detection are given from Papinicolau to blood serum coagulation and zymohexase. The figures that are quoted leave a false impression of accuracy of these tests. In remarking about Drs. Langman and Burr's electronic device it stated that 616 patients were checked and the apparatus in each of these said no cancer was present, but more careful checks by other methods found the disease in five of the cases. "This is an indicated accuracy of 99 per cent," according to the author. Oh, for a Palmer neuro-colometer! This

sort of article will give a great many patients a fake sense of security or be a boon to quackery and it should be read by every physician so he can explain it to the patients until the tests are proved good or bad by more abundant and thorough research.

"Childhood Diseases" — by Harriet Hester — *Today's Woman*, March, 1950, page 48.

An old wives saying, "Let Jimmy catch it and get through with it," is very justly discussed concerning the question, "Should your healthy child be deliberately exposed to the childhood diseases?". Nearly all of these diseases are discussed and the reasoning for or against purposely exposing a healthy child to them. In my opinion this is a very fair article and one that will aid the physician in his dealings with the parents.

"Endometriosis" — by Maxine Davis — *Good House-keeping*, March, 1950, page 15.

This article is by far one of the best written about any technical medical subject wholly for lay consumption and by a lay author. It gives a good, simple, concise explanation of the theories of etiology, pathology and the different treatments used or advocated. In fact, the physician would do well to read this so he could more simply explain this condition to the patient.

CLINICAL AND LABORATORY CONSIDERATIONS IN THE DIAGNOSIS OF PANCREATIC CANCER

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Potentially curative operations for cancer of the pancreas are now surgically feasible. For these surgical advances to be effectively translated into terms of lives saved, however, early diagnosis is essential. Yet, the diagnosis of cancer of the pancreas is notoriously tardy. In this presentation some of the causes for this delay will be considered and some highlights of the clinical and laboratory features of the disease will be discussed. It is hoped therefrom to stimulate interest in the disease and its manifestations to the end that it may become recognized earlier.

Many reasons may be advanced to explain the delay in diagnosis of pancreatic cancer: the gland is difficult to examine by ordinary physical means; it cannot be directly visualized by x-ray; the presently available tests of pancreatic function afford no etiologic information; and we have become attuned to the late rather than the early manifestations because the clinical picture as we know it has been drawn from patients with advanced stages of the disease. Still another factor operative in delaying diagnosis is the persistence on the part of physicians of mistaken notions regarding the clinical picture of cancer of the pancreas.

A few years ago I conducted a poll in an attempt to learn something of the ideas then entertained regarding the clinical features of pancreatic cancer¹. Four groups of people were purposely selected for questioning because it was felt they would probably best reflect current medical thinking. These groups consisted of (1) fourth year medical students, (2) residents and interns, (3) graduate medical students, and (4) general practitioners who had been in practice for five years or less. In all, 120 individuals who had graduated or were about to graduate from 34 different medical schools in the United States and Canada were polled. After

the nature and purpose of the poll was first explained without the disease in question being mentioned, each person was asked what feature he associated most closely in his mind and expected to find most often in patients with cancer of the pancreas. It was thought that the answer, however crude an index, would still afford insight into the thinking processes of alert and recently trained physicians. It would appear reasonable to assume, at least, that these people would be apt to think of the disease when the feature selected by them was present and apt to overlook it if it was absent.

Painless jaundice was selected as the outstanding feature by 43 per cent of those polled¹. An additional 49 per cent favored jaundice without qualification as to the presence or absence of associated pain. Hence, 92 per cent of the group polled were of the opinion that jaundice, with or without pain but more especially painless, was the outstanding feature of carcinoma of the pancreas.

Equipped with this information, the next step was to determine the manifestations of the disease as they actually occur in clinical and hospital practice. To do this, the literature up to the year 1941 was surveyed and the established cases of cancer of the pancreas seen at the Graduate Hospital of the University of Pennsylvania from 1925 to 1941 were analyzed.

This review made it clear that any attempt to depict the clinical picture of pancreatic cancer, however careful, must at best be imperfect. The incidence of the several signs and symptoms vary considerably depending upon the source of material. For example, if cases selected for review come from surgical institutions or represent patients who were operated upon, the incidence of jaundice is higher than in autopsy series since jaundice is a symptom commonly lead-

ing to surgical intervention. Similarly, the signs and symptoms vary in their incidence depending upon the portion of the gland predominantly involved by tumor. This in turn is variable depending upon the method of establishing the site of dominant involvement. Thus, significantly fewer cases show involvement of the head when diagnosis rests on post-mortem examinations than when diagnosis is based entirely on the findings at operation. Yet, the clinical picture described in the literature for cancer of the pancreas confined to the head, or to the body or tail, is founded to a considerable degree upon cases in which the site and extent of involvement was established purely and simply from operative observations.

Another shortcoming in any attempt authoritatively to establish the clinical picture of carcinoma of the pancreas, is the fact that tumors which appear to have their origin in the pancreas many times prove instead to have arisen from the bile ducts or the other structures in the ampullary area. Since the diagnosis in many cases reported in the literature was established on the basis of unconfirmed surgical operations, it is obvious that the data from which we must construct the clinical picture very likely contains inaccuracies.

In view of these considerations, it was thought best to forego any attempt to differentiate cancer of the head from cancer of the body or tail of the pancreas. It seemed a better approach for the time being to amalgamate all of the available data into a single composite picture. Such an approach was adopted subsequently by other investigators with remarkably similar findings^{2,3}. This not only lends support to the data obtained earlier by me, but indicates that these data are still valid.

CLINICAL FEATURES

Cancer of the pancreas, generally speaking, is a disease of rapid course. The average interval from time of onset to hospitalization is six months with an average of some seven months from onset to death¹. The disease affects older people predominantly and is more common in males than in females.

The outstanding symptoms in order of frequency are weight loss, pain, and jaundice^{1,2,3}. *Weight loss* is almost invariably present and is notable for its degree and rapidity.

Pain is described by about three out of four patients at one time or another during the course of observation. It occurs more

often when the body or tail is involved than when the head alone is affected. Even so, pain is still a common symptom when the growth appears to be confined to the head^{1,4}. While pain in pancreatic cancer has many interesting features, it has no special characteristic by which it may always be recognized. It varies in its character but is usually constant and of a fair degree of severity. It most often is situated in the upper abdomen and frequently radiates into the back. Exaggeration at night or when the patient is recumbent is very characteristic. At these times, the patient frequently sits up, leans forward or actually walks about the room in a stooped-over fashion in an attempt to achieve some degree of relief. Still another noteworthy feature is a tendency for the distress not infrequently to mimic duodenal ulcer. Indeed, duodenal ulceration may actually be associated with pancreatic cancer, either as a independent lesion or secondary to invasion of the duodenum by the tumor.

Jaundice occurs less often than pain as an initial symptom, as a chief complaint, and at some time or other during the course of observation^{1,2,3}. Not only is it less frequent than pain, but when both symptoms develop in the same individual, pain precedes jaundice much more often than not. Moreover, this obtains even when the head is the site of dominant involvement^{1,4}. When the carcinoma is confined to the body or tail, jaundice is seen less often than when the head is the principal site of involvement. On the other hand, jaundice does not invariably appear when the head is affected. In about one-fifth of the cases gathered from the literature of carcinoma seemingly restricted to the head, jaundice was not evident at any time¹.

In view of the outstanding frequency of pain, it is not surprising to find that *painless jaundice* actually occurs in a minority of the cases of pancreatic cancer. Only one-fourth of the patients encountered at the Graduate Hospital had painless jaundice when first seen and in many of them pain sooner or later supervened. The relative infrequency of painless jaundice deserves to be emphasized, particularly since so many of the people polled selected it as the outstanding feature of the disease.

Among the other symptoms which occur with a fair degree of frequency, *diarrhea* is worthy of special mention. Although in point of actual frequency diarrhea is less common than *constipation*, nevertheless the ra-

tio of constipation to diarrhea in this disease is much less than that in ordinary clinical practice. Every so often, diarrhea is the heralding manifestation of pancreatic cancer. Friedenwald and Cullen were so impressed by this symptom they recommended that cancer of the pancreas be suspected whenever persistent diarrhea is seen in a patient of middle life or older for which no adequate explanation can be found⁵.

Some patients with pancreatic cancer present an interesting group of *mental symptoms* consisting principally of anxiety, obstinate insomnia, depression with crying spells, and an overwhelming fear of impending disaster⁶. These symptoms are by no means specific nor in any way limited to cancer of the pancreas. Nevertheless, they deserve to be looked on as suspect, especially if they appear without obvious cause in an older person and more especially if they are associated with abdominal or back pain. Far too often, pain in a person with such nervous symptoms is dismissed as still another psychosomatic manifestation; only when jaundice makes a belated appearance is its significance fully appreciated.

Multiple venous thrombi appear to occur more often in carcinoma of the pancreas than in carcinoma in other organs^{7, 8}. This is particularly the case when the carcinoma is confined to the body or tail. Should multiple venous thrombi or migrating peripheral thrombophlebitis be encountered in older persons without satisfactory local causes, carcinoma of the pancreas certainly deserves to be considered.

Palpable distention of the gallbladder is one of the traditional features of pancreatic carcinoma. On the average, a distended gallbladder may be felt in about one-half of the patients with jaundice. Distention of the gallbladder is encountered still more frequently in such patients at laparotomy or necropsy. This would indicate that while Courvosier's Law is diagnostically useful, it is more useful to the surgeon exploring the abdomen in search of a primary lesion than it is to the clinician performing a physical examination.

LABORATORY FEATURES

Anemia, while frequent, is generally only mild in degree in cancer of the pancreas. This is rather remarkable in view of the marked weight loss and wasting which is seen in so many patients with this disorder.

Steatorrhea is another supposedly classical manifestation of pancreatic cancer. How-

ever, fatty stools have not been found in most patients with the disease^{1, 2}. On the basis of averaged reports in the collected literature, no better than one in 10 patients exhibit fatty stools. It is only fair to say, however, that if stools were examined more often and exact chemical studies used, the incidence of steatorrhea would undoubtedly be greater than indicated. The failure to apply accurate analyses for fecal fat is understandable because such procedures are time-consuming and require exacting techniques. However, there can be no excuse for failure to use the very simple procedure described by Dorothy Andersen⁹. By this method, a stool sample is placed on a microscopic slide and stained with alcoholic solution of Sudan III or IV. The fat content is then graded on a scale ranging from negative to plus four depending upon the amount of Sudan-stained fatty material seen per low power microscopic field. If two or less droplets of fat-stained by Sudan are present, the finding is considered to be negative; if half or more of the visible field appears Sudan-stained, the grading is plus four. Negative and plus four readings are of distinct significance.

Disturbance in carbohydrate metabolism manifested by glycosuria, hyperglycemia or an impaired dextrose tolerance test, occurs with surprising frequency in patients with cancer of the pancreas. A diabetic type of dextrose tolerance curve is especially frequent and may be found even in the absence of glycosuria or fasting hyperglycemia.

Obstruction of the pancreatic ducts by neoplasm frequently results in regurgitation of pancreatic enzymes into the peripheral circulation. As a consequence, *hyperlipasemia*¹⁰ and *hyperamylasemia*^{4, 11} occur surprisingly often and are useful diagnostic signs in cancer of the pancreas. Serum lipase determination appears to be the more valuable of the two in this disease because it tends to be elevated more frequently. Serum lipase was abnormally elevated in over one-third of the Graduate Hospital cases in which this determination was made before operation; over half of the cases showed such an elevation on at least one occasion throughout the course of observation.

It is important that determinations of serum lipase be made serially. During very early stages of the disease, before obstruction has advanced sufficiently, serum lipase concentration may be within the normal

range; late in the course of the disease, when the acinar tissue is largely destroyed by cancer, serum lipase concentration may again be normal or even subnormal¹³. Single determinations made at either of these extremes would fail to detect an elevation which may have occurred at some stage intermediate between them.

Estimation of the concentration of pancreatic enzymes in the serum before and after the administration of various pancreatic stimuli may add considerably to the value of these tests. On the basis of animal experiments conducted by them, Popper and Necheles¹² have suggested that serum amylase and lipase concentration be determined before and after (a) a relatively weak stimulus for enzyme concentration, such as secretin; and (b) a relatively strong stimulus for enzyme concentration, such as a combination of secretin and one of the parasympathomimetic drugs. Elevation of serum amylase or lipase concentration after a dose of secretin insufficient to affect the serum enzyme level in normal persons would indicate partial obstruction of the pancreatic ducts; failure to observe an elevation in serum lipase or amylase after strong stimulation would indicate atrophy of the gland.

DUODENAL ANALYSIS

Interference with external pancreatic secretion by cancer may be detected also by *analysis of duodenal contents before and after the administration of various pancreatic stimuli*. This means of study requires duodenal intubation and some detailed chemical studies. While these are drawbacks limiting its wide application, the procedure is of real value. Not only may it serve to recognize deficiency of external pancreatic secretion, but additional information of use in differential diagnosis may also be obtained.

Under normal circumstances the duodenal contents show some degree of bile-staining. The color may almost completely disappear as pancreatic juice flows into the duodenum in response to secretin stimulation. Chemical determination, however, usually indicates some degree of icterus still retained. As the pancreatic juice diminishes toward the end of the test, bile-staining once again becomes apparent (Fig. 1). In the absence of the gallbladder, essentially the same curve obtains except that the degree of bile-staining is greater in the fasting contents and the icterus index does not lower to the same degree as under normal circumstances. When there is obstruction to the main extra-hepatic

duct at some point above its opening into the duodenum, bilirubin is completely or almost completely absent from the duodenal contents both before and after secretin. This finding, coupled with evidence of intact external pancreatic secretion as shown by a normal volume of secretion with a normal bicarbonate and enzyme output, would place the obstructing lesion outside the pancreas and somewhere along the biliary tract proper.

Still another examination which may be performed on the duodenal contents obtained by intubation, is *cytologic smear examination* after the method of Papanicolaou¹⁴. Experience to date with this method of study is limited, but the few data already available are promising. An adequate technic has still to be worked out and many problems remain to be solved. Nevertheless, it is an avenue of approach that deserves wide adoption.

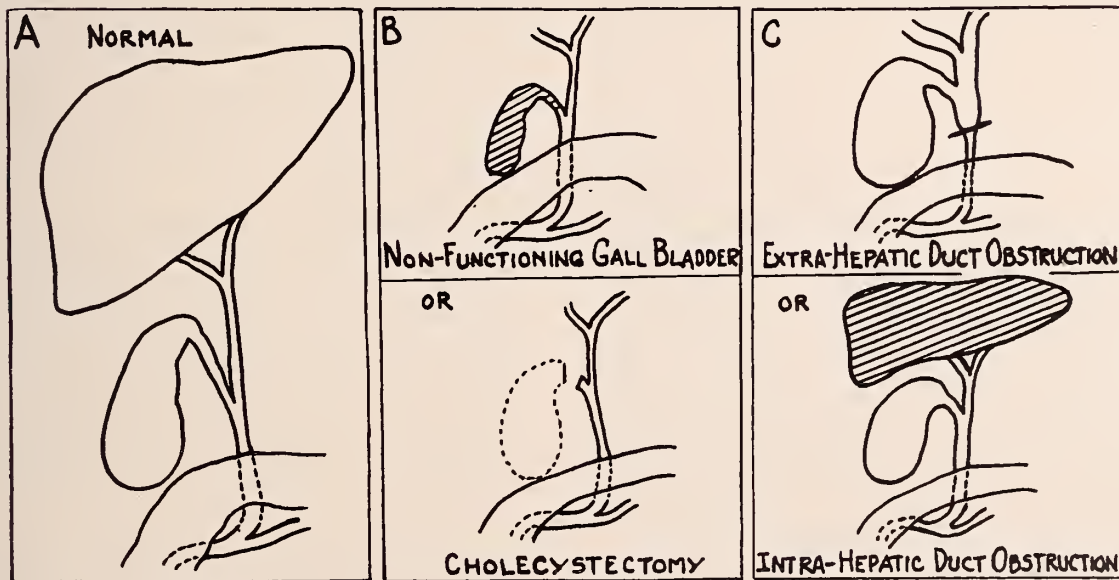
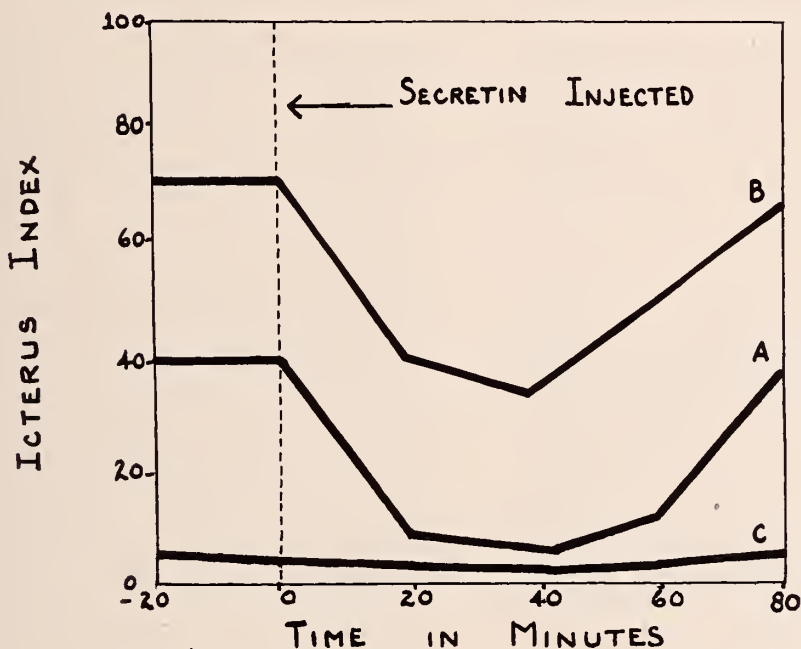
X-RAY FEATURES

One of the most valuable means of recognizing pancreatic cancer is roentgenologic examination of the upper gastro-intestinal tract by means of barium meal. The x-ray changes which may be observed depend upon encroachment by the pancreatic neoplasm mainly on the stomach and duodenum. This means that the study is apt to be negative during the very early stages when diagnosis is most important but when the neoplasm has not yet attained sufficient size to produce compressive or infiltrative changes in the adjacent viscera. It is likewise true that the roentgenologic alterations are not pathognomonic of pancreatic cancer. Nevertheless, almost half of the patients examined roentgenologically at the Graduate Hospital¹ and at the University of Chicago³ presented signs suspicious of a tumor in or about the head of the pancreas. As experience increases and roentgenologists grow more alert to the disease, it may be expected that the yield of positive findings will become still greater.

GASTROSCOPY

Examination of the stomach by means of gastroscopy is of some value in the recognition of cancer of the pancreas. Its contribution is largely that of excluding a primary intrinsic tumor of the stomach with which cancer of the pancreas may clinically be confused. In some cases, however, it may yield more positive information by revealing bulging or other defects in the stomach wall caused by an underlying pancreatic mass.

DUODENAL ICTERUS INDEX CURVES FOLLOWING INTRAVENOUS SECRETIN



PERITONEOSCOPY

Peritoneoscopy may be of some aid in the diagnosis of pancreatic cancer, again in large part by identifying other intra-abdominal lesions from which carcinoma of the pancreas must be differentiated. Metastasis to other organs may be recognized and biopsy of a metastatic lesion may suggest the pancreas as the most likely primary site. Occasionally, in puzzling cases of obstructive jaundice where cholecystography cannot be performed, opaque material may be directly injected into the gallbladder under peri-

toneoscopic guidance. Cholecystocholangiograms exposed after such a procedure may give evidence of pancreatic neoplasm by demonstrating an abrupt obstruction to the flow of the opaque material at the distal portion of the common duct.

SUMMARY AND CONCLUSIONS

If the potentially curative operations of partial and total pancreatectomy are to be gainfully employed in the treatment of patients with pancreatic cancer, early diagnosis is essential. To make the diagnosis earlier it is necessary that our clinical index of

suspicion of the disease be raised. It is essential, too, that some of the tenaciously held notions regarding the clinical manifestations of pancreatic cancer be revised. The importance and frequency of pain must be appreciated. It must be realized that while painless jaundice is undoubtedly of great diagnostic value, it is a symptom-complex that is not characteristic of most cases. Derangement in internal and external pancreatic secretion should be looked for by means of the tests currently available. As part of these studies, cytologic smear examination should be made of the duodenal contents in the hope of recognizing malignant cells which may have originated in the pancreas. Finally, roentgenologic examination of the gastro-intestinal tract should be employed far more often than has been the case.

More selective tests of pancreatic function and a means for rendering the pancreas radiopaque remain to be developed. Remaining also, is the accumulation of accurate data on proven cases of cancer of the pancreas. From such data it may become possible to detect the earliest manifestations of the di-

sease and to differentiate lesions of the head from those of the body and tail.

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MEET OUR CONTRIBUTORS

J. Edward Berk, M.D., Sc.D., guest speaker at the 1949 Annual Meeting, has an article on "Clinical and Laboratory Considerations in the Diagnosis of Pancreatic Cancer". Dr. Berk, who is a member of the department of medicine, Temple University, Philadelphia, was graduated from Jefferson School of Medicine in 1936. His specialty is gastroenterology and he has been certified by the American Board of Internal Medicine and the sub-specialty Board of Gastroenterology. He is a member of the American College of Physicians, American Gastroenterological Association, American Federation for Clinical Research, and American Gastroscopic Society.

David F. Hudson, M.D., Tulsa, wrote "The Management of Syphilis in Pregnancy" in this issue. Dr. Hudson was graduated from Johns Hopkins in 1923 and limits his practice to his specialty, public health. Dr. Hudson was in private practice as urologist from 1930 to 1939, and was consultant, V.D. control, State Health Department in 1938 and 1939 and V.D. control officer of Tulsa City-County Health Department from 1939 to 1949. He is now with the communicable diseases division of the health department there. He is former secretary-treasurer of the Tulsa County Medical Society. Dr. Hudson is a member of the American Public Health Association and the South Central Branch of the American Urological Association.

John R. Taylor, M.D., A.B., B.S., Kingfisher, has an article on "Jaundice, Concepts with Reference to Hepatitis" in the April Journal. Dr. Taylor was graduated from the University of Oklahoma School of Medicine in 1934 and his specialty is internal medicine. He is an associate of the American College of Physicians and a delegate from Kingfisher County. Dr. Taylor was in the army during the war.

W. Carl Lindstrom, M.D., F.A.C.S., Tulsa, has an article on "Bleeding in Early Pregnancy" in this Journal. A member of the American College of Surgeons and the Southwest Surgical Congress, his specialty is obstetrics and gynecology. He was graduated from the University of Oklahoma in 1934. Before coming to Tulsa, he practiced in Oklahoma City from 1936 to 1940.

L. C. Northrup, M.D., F.I.C.S., Tulsa, whose article "Common Complaints of Pregnancy," appears in this issue, was graduated from the University of Nebraska in 1919. Limiting his practice to his specialty of obstetrics and gynecology, he has been certified in obs. gyn. by the qualification board of the international board. He is a member of the International College of Surgeons.

JAUNDICE, CONCEPTS WITH REFERENCE TO HEPATITIS*

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Early Greek physicians were acquainted with the symptom jaundice. However, they considered it truly a disease. Yellow staining of the skin, sclera, and mucous membranes has been recorded throughout medical writings over the years. Many physicians have told their patients they had torpid livers (whatever that may be). At least these physicians were probably right when they said the trouble was in the liver. In more recent years many have worshiped at the shrine of "pigmented urine." The greatest strides in liver disease, especially in relation to hepatitis, have been made in the last 10 years. A better understanding can be had of jaundice by a review of certain aspects of the normal metabolism of hemoglobin since bilirubin is the chief derivative of the pigment fraction of destroyed hemoglobin.

Hemoglobin is composed of pyrol building blocks of the porphyrin nucleus. The hemoglobin molecule is composed of four such nuclei.¹ The iron portion or iron porphyrin complex is designated as "heme". There are four heme molecules attached to each molecule of globin. The exact method by which hemoglobin is destroyed in the reticuloendothelial system is still not understood. Watson¹ thinks that globin, a protein of similar molecular weight as albumin, is attached to the pyrol nuclei by carboxyl group and probably broken at the alpha-methyl bridge.

Bilirubin is formed in the reticuloendothelial cell of the liver (The Kupffer cells), spleen, and bone marrow, under normal conditions. Also when blood cells are extravasated in contact with cells of mesodermal origin (pleura, pericardium, peritoneal cavities, subarachnoid space, pulmonary alveoli, in congestive heart failure, pulmonary infarcts, hemorrhage into connective tissue).²

Bilirubin thus formed is carried in the blood to hepatic cells and is excreted by

them in the bile. The bilirubin is transported in blood as bilirubin-globin and in the liver the globin is split off and bilirubin excreted in bile as sodium bilirubinate.

The bile thus formed passes down the intestinal tract to the colon where it is acted on by bacterial flora and changed to urobilinogen (actually two compounds are made, mesobilirubinogen and stercobilinogen). Urobilinogen is readily oxidized to urobilin, an orange yellow pigment partly responsible for the color of normal stools. The urobilin is confusing and here only urobilinogen will be spoken of in the breakdown of hemoglobin.

The amount of hemoglobin has been calculated from the total circulating blood. If the total blood volume is 5,000 cc and hemoglobin in concentration 15 gm 100 cc, the quantity of circulating hemoglobin is 750 gram. The average life of red blood cells is approximately 120 days, which means 0.83 per cent of hemoglobin mass or 6.22 grams is destroyed daily and replaced. The breakdown of one gram of hemoglobin results in formation of approximately 25 mgm of bilirubin. Under normal circumstances about 220 mgm of bilirubin enters the duodenum daily in the bile and is changed by anaerobic bacteria, chiefly in the colon, to urobilinogen. Varying amounts of urobilinogen are reabsorbed into the portal circulation and returned to the liver. The filling of the colon (constipation) determines to a large extent the amount reabsorbed and as a consequence smaller amounts are excreted. The reverse tends to be true. In severe diarrhea, unchanged bilirubin may be excreted in the stools, rapid oxidation to biliverdin resulting in the green color of the stools.

The next step normally leads from destruction of the erythrocyte to the excretion of urobilinogen. The present ideas are that the chemical changes involved take place in three sites — reticuloendothelial

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system, the liver and the colon. The bone marrow is thought to assume the major role in production while the spleen and liver have a minor role.³ The old views held that the polygonal cells of the liver had the major role but it is believed now that they are concerned largely with excretory function so far as the bile pigment is concerned. The exact manner in which urobilinogen is handled in the liver is unknown. (It is known that if there is hepatocellular functional disturbance of any appreciable degree, the urobilinogen goes into the general circulation and is excreted by the kidneys.) The normal range of urobilinogen in healthy adults is 0 to 3.5 mg per 24 hours, whereas the normal range for fecal urobilinogen is from 40 to 280 mgm a day.⁴ In severe liver damage, urine urobilinogen may increase to 50 to 100 mgm. In clinical diagnosis where jaundice is present, there are several things to consider when urobilinogen is not found in the urine. The bile can be blocked from the intestinal tract and no urobilinogen will appear in the urine. Example is carcinoma of the head of the pancreas or severe hepatitis when jaundice is at its peak. In severe diarrhea, the contents of the bowel are moved along so fast that there is no time for change of bilirubin to urobilinogen and its absorption. Also if there is sufficient renal retention of nitrogen, urobilinogen may be retained and none or little will appear in the urine.

In considering abnormal pigment metabolism, one turns to Rich's ideas of jaundice. He divides jaundice into two types, "retention jaundice" and "regurgitation jaundice".⁵ In retention jaundice the bilirubin is retained in the blood because of the excess quantity of the bilirubin or because of subnormal liver excretion of bilirubin. In regurgitation jaundice the bile regurgitates or escapes from the bile canaliculi into the blood stream. In the normal liver lobule sinusoids between the cords of liver cells carry blood from branches of the portal vein and the hepatic artery to the central vein of the lobule, from which blood flows to hepatic vein and to vena cava. As blood flows in the sinusoids, bilirubin-globin is taken up by the polygonal cells and Kupffer cells. The tiny bile capillaries that lie between the individual polygonal cell are not ordinarily seen in section of normal liver. The canaliculi receive freed bilirubin or sodium bilirubinate and other chemicals of bile from the polygonal cells and pass them

into branches of the hepatic duct at the periphery of each lobule.

Bilirubin-globin in the sinusoidal blood enters the polygonal cells either directly or through the Kupffer cells and sodium bilirubinate flows into the canaliculi. It is still unknown whether protein (globin) is split off by the polygonal cell or by Kupffer cells.⁷ Watson, Gonzalez-Oddane are of the opinion that Kupffer cells are probably responsible for the extraction^{6, 7, 8, 9} of globin from bilirubin-globin. This opinion is not held by many investigators.

Abnormality of bile pigment excretion in retention jaundice is described by Rich.⁵ The polygonal cells are anatomically intact, but some of them have subnormal function resulting in the bilirubin-globin partially removed and the remainder retained in the blood. This is particularly true in hemolytic disorders where there is a rapid rate of blood destruction and large amount of bilirubin-globin freed for the liver to handle. Rich believes the liver has enormous reserve in its capacity to excrete bile pigment and that jaundice rarely develops from overproduction of pigment alone. The combination of rapid destruction of hemoglobin and functional impairment of polygonal cells, however, often produce jaundice.¹⁰

In hemolytic anemia, the liver cells probably have reduced functional capacity due to anoxemia (Rich) and to toxic effects of the red cell destruction. Since the pigment is not excreted, it remains in the blood stream resulting in jaundice. Similar mechanisms are probably at work in jaundice, seen in pernicious anemia, malaria, congestive heart failure, pulmonary infarct, pneumonia or any place where the reticulo-endothelial cells in other parts of the body break down sufficient excess of hemoglobin from stagnated erythrocytes to burden a subnormal liver (anoxia) with more bilirubin-globin than can be accepted. One wonders if anoxia doesn't play a big part in the subnormal functions of the liver. The jaundice commonly seen in newborn is retention jaundice. We know it usually clears in a few days by increased fluids and proper bowel function. The polycythemic state and destruction of red blood cells results in the icterus neonatorum.¹¹ Rich thinks the newborn liver is immature and incapable of handling increased amounts of pigment. The pathophysiology of icterus neonatorum is not entirely clear. Lin and Eastman say

that newborn excrete intravenous injections at a normal rate.

It is now known that a number of people have a slightly increased icteric index and elevated serum bilirubin and on proper observation show yellow tinge of skin and scleros. They handle intravenous bilirubin slowly. If sufficient studies are used, a whole battery of liver function tests as described by Watson, these individuals can be earmarked into two groups,² those showing constitutional hepatic dysfunction or familial nonhemolytic jaundice and those with little or no hepatic abnormality other than impaired bilirubin excretion. One wonders if some of these probably did not have an infectious hepatitis without jaundice. Capps thinks that many vague gastrointestinal symptoms we see frequently are on this basis.¹²

It can be seen then that retention jaundice can be caused by an increased amount of bilirubin-globin in the blood either by too rapid destruction of hemoglobin or to subnormal function of the liver and failure to excrete the pigment.

In regurgitation jaundice, a reflux of whole bile from the canaliculi escapes into the blood stream. When some liver cells are necrotic, the adjacent bile canaliculi are destroyed and bile spills into the blood stream directly or passes up the tissue spaces to lymph vessels thence to the thoracic duct and into the blood stream. A mechanism of this type is seen in hepatocellular necrosis regardless of etiology.

Many causes of intensive liver damage have been known for a long time. Chloroform, carbontetrachloride, cinchophen, arsenic, virus of yellow fever, syphilis, Weil's disease and metabolic disturbances (eclampsia) have been known by the profession to cause jaundice. Many infectious agents are still unknown, particularly among the viruses. The role of dietary deficiency in the pathogenesis of chronic hepatitis and cirrhosis has only been appreciated in the last few years. An understanding of the etiology and pathogenesis of infectious hepatitis and hemolysis serum hepatitis has been reached even more recently.

Unless the flow of bile through the major part of the duct system of the liver is prevented, jaundice does not ordinarily result. When this occurs, the bile canaliculi and ducts are overfilled and bulge into tissue space causing a diffusion of bile. The ampullae that connect the bile capillaries with the

bile ducts or canals at peripheric of the lobule may act as safety valves by rupturing and thus reduce back pressure on the liver cells. These ampullae have been described by Aschoff as the "Achilles heel of the biliary tract".

Most causes of extrahepatic biliary obstructions, such as tumor, stone, stricture are well known and require no comment. In intrahepatic obstructive jaundice, the exact nature of the jaundice is not well understood. After the jaundice has continued for some time in this condition, laboratory evidence may indicate, at times, partial obstruction, and other times complete obstruction. Biliary obstruction has been found in cases of hepatitis due to a variety of causes and with variable amounts of associated hepatocellular damage. Where there is confusing evidence of the type of jaundice, no one or two tests can be relied upon but a battery of tests as suggested by Watson may help to differentiate the cause. An example in hepatocellular disturbances, there is increase in delayed clearance (tolerance), diminished hippuric acid synthesis, diminished serum albumin, diminished cholestral ester fraction, positive Hanger (cephalin flocculation) and Maclagan (thymol turbidity) test. In cholangiolor dysfunction there is increased prompt reaching¹ bilirubin, bilirubinuria, bile salts in blood and urine, increase total cholesterol in the blood, and increase serum alkaline phosphatase. Jones states that by liver biopsy, it is possible to differentiate clearly¹³ jaundice due to hepatitis and that due to undiagnosed extrahepatic block. Hoffbauer's ideas are similar.

Jaundice is due chiefly to increased permeability of cholangiales. Sodium bilirubinate escapes into the tissue space from injured ampullae of the bile capillaries and presumably reenter the blood via the lymphatic vessels or diffuse into the sinusoids.

Regardless of the cause, regurgitation jaundice is characterized by escape of bile salts into circulation. Accumulation of bile salts in blood is considered the cause of puritis — puritis is not so prominent in retention although it does occur. The bilirubin that reenters the blood in regurgitation jaundice has been separated from globin by passing through the liver. Regurgitated bilirubin, perhaps because it is in the form of sodium bilirubinate, does not combine with globin in the circulation, it therefore readily passes the renal filter and also gives a direct Van de Bergh reaction.

Human volunteer studies during the war years demonstrate that infiltrable virus was the causative agent in infectious hepatitis.¹⁴⁻¹⁶ The virus is present in the blood, stool, urine and nasopharyngeal washings of infected persons. Transmission occurs for the most part by fecal contamination. Since the virus withstands chlorination, it is important that cases of infectious hepatitis be subjected to isolation precautions as carried out in typhoid or dysentery.

The term "homologous serum jaundice" arose because persons receiving pooled human serum or plasma or whole blood occasionally developed jaundice. Very small quantities (0.01 cc) of infected plasma would produce the disease. This type of jaundice was observed after administration of measles and mumps convalescent serum, yellow-fever vaccine made with human serum, pappataci fever vaccine.¹⁷

Freezing, drying, and storing do not seem to alter the icterogenic properties of plasma and serum. The inactivation of plasma also fails to inactivate the hardy agent of hepatitis. The use of the gamma globins in thousands without the development of jaundice can probably be explained by the presence of specific antibodies in this fraction of the pooled blood. The prevention and attenuation of infectious hepatitis has actually been accomplished by administration of gamma globin in controlled subjects. There have been no reports of hepatitis attributed to administration of normal serum albumin (made by treating albumin fraction with heat at 60 C., thus exceeding thermal death time (10 hours) of strain serum hepatitis virus). Since such small amounts are required of infected serums to produce jaundice the hazard of jaundice may be increased as the number of donors and recipients are increased. Entire pools are infected from one donor. In spite of the care in obtaining pooled sera, they still are infected. It is hoped that the new work of exposing plasma to ultra violet rays and reducing the number of donors in the pools will be effective in handling the problem.

Paul¹⁸ and others state that the relation between homologous serum hepatitis and naturally occurring infectious hepatitis is not yet settled. L. E. Young indicates there are at least two types of hepatitis virus that are immunologically distinct and that their incubation periods differ sharply. It is also significant that stools from patients with serum hepatitis have thus far proved non-

infective when administered to human volunteers. Stools of infectious hepatitis patients are of course highly infectious. Despite these differences, it seems likely that the two hepatitis are caused by filterable viruses that are closely related and that the agent of serum hepatitis has been modified through passing from person to person by artificial means. Both types of hepatitis can be transmitted by blood plasma and serum as has been found out by large syphilitic and diabetic clinics by contaminated needles. It may be that the patient we saw years ago in arsenic clinic thought to have had jaundice due to arsenic was due to serum hepatitis.

Lucke, Malory et al confirm Eppinger's early report that so called catarrhal jaundice is in most cases primarily a hepatitis. The principle lesion in fatal cases being those of acute yellow atrophy. The pathology in serum hepatitis is essentially the same. Watson and Bloomfield think that cases of hepatitis that become chronic, probably wind up as cirrhosis. This of course has not been definitely proved.

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THE MANAGEMENT OF SYPHILIS IN PREGNANCY*

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The presence of syphilis in pregnancy may be a problem to many physicians. This is especially true when the woman comes to the physician late in pregnancy and there is little time before the expected delivery for the necessary treatment. Since anti-syphilitic treatment given during pregnancy is intended primarily to prevent or cure syphilis in the fetus, it is very important to use effective methods. Weekly treatments with arsenic and bismuth must be started before the fifth month and continued throughout the pregnancy to secure the best results. Even with intensive arsenotherapy of the mother, according to Moore¹, 15 per cent of babies have been born with syphilis. When treatment is irregular or begun after the fifth month of pregnancy, the chances of securing a baby free of syphilis become less and less. Those physicians who have seen hemorrhagic encephalitis, severe dermatitis and other reactions from arsenical therapy, can fully appreciate the relative non-toxicity of penicillin.

The spectacular results with penicillin therapy as reported by Goodwin and Moore², Ingraham, Stokes and co-workers³ and verified by other investigators, showing a failure rate of only two per cent of babies born of mothers with early syphilis, indicate a very important advance in the treatment of syphilis in pregnancy. This contrasts sharply with a failure rate of five to 50 per cent with arsenic-bismuth therapy, depending on the time in pregnancy the treatment was started and the amount given.

Goodwin and Moore² recommend that for the purpose of preventing prenatal syphilis, metal chemotherapy for the syphilitic mother be abandoned and that penicillin be adopted universally in its place. Other investigators also reported penicillin superior to arsenic and recommended at least 2.4 million units total dosage to be given intramuscularly at intervals of two to three

hours for at least seven and one-half days. Subsequent observations with the use of penicillin in oil-beeswax have demonstrated its effectiveness. Ingraham and co-workers⁴ treated 45 mothers with a total dosage of 4.8 million units of amorphous calcium penicillin in peanut oil-beeswax given over a period of nine days. The results were essentially equal to those of aqueous penicillin. They recommend this type of treatment for women who cannot be hospitalized.

Mahoney⁵ advocates the use of 600,000 units of procain penicillin in two per cent aluminum monostearate daily for five days with a total of three million units which has been effective in both early syphilis and early syphilis in pregnancy.

In the days of arsenic and bismuth therapy the policy became more or less generally established of treating a woman with syphilis through each subsequent pregnancy regardless of the amount of treatment originally received or her clinical or serological status. Obviously many women were overtreated but no generally accepted method was available to determine which should be treated and which could be permitted to go through pregnancy without further treatment.

Goodwin and Farber⁶ observed 385 women who had received previous treatment through 596 pregnancies during which further anti-syphilitic treatment was purposely omitted. Of the 596 infants, 549 or 92 per cent were born alive. Postmortem examination of 20 of the 48 infants still-born or miscarried showed no evidence of syphilis. All of the 549 children followed (88 per cent for more than two months, 70 per cent more than one year) were normal and non-syphilitic. The criteria of adequate treatment were 4.0 Gm. or more of arsphenamine or its arsenical equivalent with concomitant bismuth or 2.4 or more million units of penicillin. The authors recommend that until further information accumulates a syphilitic woman should be given further treatment in any pregnancy in which she

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shows clinical evidence of active syphilitic infection, or, if with no evidence of activity she has a positive STS (Serologic Test for Syphilis) in a quantitative titer of 16 or more dilution units.

All observers stress the importance of frequent observation during the prenatal period to detect evidence of serologic and clinical relapse. Speiser⁷ and co-authors found that a patient who had responded satisfactorily following previous penicillin therapy did not need re-treatment during subsequent pregnancies if adequate follow-up observation is assured.

Ever since the organization of the Tulsa Cooperative Clinic in 1939, special attention has been paid to syphilis in pregnancy since the prevention of congenital syphilis is one of the most important phases of preventive medicine. Follow-up service has been provided, not only for patients treated in the clinic and their babies, but also for patients who have been referred to the clinic by physicians for post treatment observation and monthly quantitative STS. The Tulsa County Public Health Association, which has an active maternal health program, works very closely with the clinic and sends in pregnant women with positive STS or history of syphilis for diagnosis, evaluation and treatment.

Most of the pregnant women with syphilis coming to the clinic have had previous anti-syphilitic treatment. Occasionally a woman previously treated would not report to the clinic or a private physician and go through a pregnancy without medical observation and drop in some time after the baby was born for a "check up." Follow-up of these babies showed no evidence of syphilis in any child whose mother had a negative STS or had received treatment for late syphilis and most of the women previously treated for early syphilis had non-syphilitic infants also.

In the latter part of 1946 we began to observe pregnant women more critically and withheld treatment if they had had previous adequate treatment and their clinical progress was satisfactory.

The methods used were those available to the average private physician, namely, history, physical examination, monthly quantitative STS (chiefly quantitative Kahns) sent to the local or the State Health Department laboratory and referral to the Oklahoma Medical Center for treatment. Those who came in too late in pregnancy to go to the rapid treatment center were either re-

ferred to private physicians or given absorption delaying preparations of penicillin on an outpatient basis. The babies were followed (except those which could not be located) for at least three months and absence of symptoms or signs of syphilis and negative STS at three months of age (or later) were considered evidence that the child was free of syphilis. X-rays of the long bones were not available.

It was not considered necessary to re-treat a woman showing no clinical evidence of activity whose blood was negative or if positive, with a low quantitative titer. Eight to 16 dilution units or 32 to 64 Kahn units were considered reason for retreatment in early syphilis or the patient was watched very closely. In case of late syphilis, patients with titers of 16 to 32 dilution units or 64 to 128 Kahn units, were permitted to go without treatment if under constant observation and not re-exposed to infection. A steady increase in titer in early syphilis was also considered reason for retreatment, and any woman known to be exposed to primary or secondary syphilis by sexual contact late in pregnancy, was promptly treated as a "contact of infectious syphilis".

The records of 67 women whose 75 pregnancies terminated in 1947 or 1948 were reviewed and no child was found to have syphilis whose mother followed through with treatment and observation in the clinic. Twenty-nine women were permitted to go through pregnancy without treatment. A number of women were retreated, not because we felt they required it, but due to anxiety on their part or at the request of their physician. There were two abortions (one induced) and one stillbirth due to dystocia. Four women disappeared after treatment so the outcome could not be determined although all four had received adequate treatment during the pregnancy, so a favorable outcome could be expected.

Of the 68 known live births, one baby died 28 hours after birth of cerebral injury.

Sixty-four children were found free of syphilis clinically and serologically at three months of age or later. One child showed no physical or serological evidence of infection at two months of age and the parents of two colored children refused to bring them in for STS. They are apparently healthy and normal.

One colored woman with early latent syphilis who had a stillborn baby in 1946, after failure to take treatment from her physician, was referred to the rapid treat-

ment center in 1947. A year later she returned to the clinic over five months pregnant but sero-negative and was transferred, at her request, to a private physician for observation. She did not follow through with the physician and returned to the clinic four months after delivery with a syphilitic baby whose blood showed a titer of 256 Kahn units. Her own blood had gone from negative to 128 Kahn units. Because of promiscuity we felt that this was a reinfection rather than a relapse.

Of the 67 women, 33 were white with 34 pregnancies and 34 colored with 41 pregnancies. Forty-six women reported for diagnosis before the fifth month, while 29 reported during, or after, the fifth month of pregnancy. Thirteen of the 29 reporting late had early syphilis and nine of these had received no previous treatment. Seven of these nine women received four million units of penicillin and two had the mapharsen, 1,800,000 units of penicillin and three bismuth schedule with no known failures. Had arsenic and bismuth alone been given there would probably have been several failures.

One woman failed to return to a physician for the report of her prenatal STS but was delivered elsewhere. We received the request for follow-up after the child was born. The baby was two months old when located and had marked snuffles and the blood showed 512 Kahn units.

A third woman had a negative STS but a genital lesion. She understood the physician to say that she should come to the clinic for treatment after the baby was born. She came in too late and the baby died of syphilis.

A fourth woman deliberately evaded treatment from any source and was referred to the clinic with a seriously ill syphilitic baby. Because of her obstruction to treatment of the baby it did not survive.

Many consultations were held with physicians regarding doubtful blood tests in pregnant women with no evidence of syphilis and no history of previous infection or treatment. These were observed and received repeated quantitative STS and most of them proved to be false positives and no treatment was given. We have seen a number of women treated for syphilis because of one doubtful or weakly positive STS who almost certainly did not have syphilis. If a physician does not have the facilities for

evaluating a weak positive or doubtful STS, consultation is recommended.

I wish to thank the staff of the clinic for their help in securing these data and the private physicians who cooperated in the management of these patients.

CONCLUSIONS

1. Until newer and more effective methods are available, penicillin should be used for the treatment of syphilis in pregnancy. We have had no experience with aureomycin.

2. When penicillin is used, adequate treatment can be given for the cure of the maternal infection as well as the prevention or cure of the fetal infection.

3. Patients who have responded satisfactorily to previous arsenic or penicillin therapy, do not need re-treatment during subsequent pregnancies if adequate follow-up observation is assured.

4. Frequent observation during the prenatal period is important with a quantitative STS at least once a month to detect evidence of serologic and clinical relapse.

5. A positive STS in pregnancy calls for prompt evaluation.

6. A pregnant woman with a positive STS and no history of previous treatment who lapses, should be promptly reported to the health department for follow-up.

7. Babies born of syphilitic women who show no clinical signs of syphilis at birth or during the first few weeks, should have at least a STS (preferably quantitative) at three months of age. Misinterpretation of maternal reagin in the baby's blood during the first few weeks of life as evidence of congenital syphilis should be avoided.

8. In the Tulsa Cooperative Clinic, no child was born with syphilis during 1947 or 1948 whose mother followed through with treatment or observation. Sixty-seven women with syphilis were observed through 75 pregnancies.

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CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Gynecology*

HOWARD C. HOPPS, M.D., AND HENRY G. BENNETT, JR., M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HOPPS: These days, death from septic processes is much less common than formerly. When such occurs, the pathogenesis is often clinically obscure (as this case illustrates). We are very happy to have Doctor Bennett to analyze the clinical aspects of this case.

PROTOCOL

Patient: M. C., 54 year old colored female.

Chief Complaints: 1) Acute lower abdominal pain, 2) Nausea and vomiting, 3) Fever.

Present Illness: The patient stated that she had known she had a "pelvic tumor" for 14 years, but she refused operation. Her symptoms were only those of weight in the pelvis, protrusion of the lower abdomen and occasional low back pain until exactly eight days before admission when she was suddenly seized with sharp, severe, cramping pain in the lower abdomen and lumbar region. The pain was accompanied by severe nausea and vomiting. In a short time the pain spread to involve the entire abdomen, but was much more severe in the lower quadrants. The patient's abdomen was very tender, and became somewhat distended. She passed a small amount of blood per vagina along with the thick, yellowish discharge which she had had for many years. She had been in bed since the onset of pain. Her bowel movements were normal until the last three days during which time she was constipated. She felt that she had had some fever but it was not measured. She denied chills and night sweats.

Past History: She went through the menopause 10 years previously. She denied any pregnancies. No previous serious illnesses had been experienced.

Family History: Noncontributory.

Physical Examination: T. — 103.2° P — 88; R. 28; BP — 112/74. The patient was obese and appeared acutely ill. Skin and mucous membranes were very dry. Lungs and heart were within normal limits. The abdomen was slightly distended. A thick panniculus made examination difficult. A firm, irregularly nodular mass extended from the pelvis up to the umbilicus. There was gen-

eralized tenderness to deep pressure — most marked in the RLQ. Peristalsis was active. On pelvic examination the cervix was pulled superiorly and anteriorly and was continuous with the abdominal mass.

Laboratory Data: Urinalysis was within normal limits. Hemoglobin was 12 Gm. per cent, with 3,500,000 RBC's cu.mm. There was a leukocytosis of 15,100, with 96 per cent neutrophils (8 per cent stabs) and 4 per cent lymphocytes. The NPN was 37 mgm. per cent. A blood Mazzini was negative. Sedimentation rate was 107 mm. in 60 minutes (Westergren).

Clinical Course: She was treated with parenteral fluids and penicillin (30,000 units i.v. followed by 15,000 units every four hours, intramuscularly).^{*} For the first three days she was not given sulfonamides because of low urinary output. However, she ran a septic temperature and began to lose ground. On the second hospital day a blood culture was taken; hemolytic streptococcus grew in one tube but the other (duplicate tube) was sterile. In view of her downhill course, it was felt that surgical intervention offered her only, and admittedly slim, chance. On the 14th hospital day an exploratory laparotomy was performed under local anesthesia. The uterus was found to be nodular and enlarged, extending four or five cm. above the umbilicus. The right tube was markedly enlarged, measuring three to four cm. in diameter. The appendix could not be visualized due to dense adhesions and limitations of the anesthetic. In the right lower quadrant there was about 60 cc. of foul-smelling pus. Ten gm. of sulfanilamide crystals were instilled and the abdomen was drained. She became progressively worse and died on the 16th hospital day.

CLINICAL DIAGNOSIS

DOCTOR BENNETT: At the very beginning we have offered to us a possible lead as to the nature of the intra-abdominal process — a known pelvic tumor which had been present 14 years. In a colored woman, by all odds that should be a myomatous uterus. Ovarian cyst should be considered too, however, since this condition also may remain fairly asymptomatic over a long period of

^{*}This was conventional therapy five years ago, at which time the patient was treated

time. Statistically, when we consider that 30 per cent of all colored women who live out their years will have uterine myomata of some size, this is, by all odds, the most likely explanation of this mass in the lower abdomen. In the face of a known tumor mass, we are confronted with a sudden attack of pain, with nausea, vomiting and fever. Are these symptoms related to this long-standing mass, or has something new been introduced? The first thing I would think of would be a *tubo-ovarian mass which had ruptured*. This seems more reasonable than rupture of a pyosalpinx, since a tube doesn't rupture very often, but a tubo-ovarian abscess may. When this occurs, symptoms are usually sudden in onset, consisting primarily of pain associated soon thereafter with fever and often with nausea and vomiting. There was a time when this condition was more frequent than it now is — this was before the days of sulfonamides and anti-biotics. It is not uncommon at all that, particularly in colored women, there is a combination of chronic pelvic infection and uterine myomata. Sudden onset of symptoms of lower abdominal pain, nausea, vomiting and fever, certainly are compatible with the diagnosis of *appendicitis* also.

When this patient came in to the hospital, her symptoms had been present for eight days, so that we do not know the physical findings present early in her course, at which time classical signs of appendicitis might have been demonstrable. The possibility of a *twisted ovarian cyst* should be considered because, when a torsion of the pedicle of a cyst occurs, symptoms of acute pain are frequently followed by generalized abdominal tenderness, often associated with fever and leukocytosis. Nausea and vomiting also are common. In like manner, a *twisted myoma* could give identical symptoms to those of a twisted ovarian cyst. We have considered then four things. All of them, I think, need to be considered in our differential diagnosis.

With these specific diagnostic possibilities in mind, let us more carefully review the history. As a part of the immediate present illness, the patient "passed a small amount of blood per vagina, with the thick yellow discharge she had had for many years." She was 10 years postmenopausal. So we have the factor of postmenopausal bleeding introduced. In gynecology we talk about this frequently because it is one of the most important signs of uterine malignancy. Statistically we know that in 80 per cent of

such instances we will find a tumor as the explanation. In 60 per cent of cases, the tumor will be malignant, according to studies made on a large series of cases. Incidentally, this study was done before the use of estrogens was quite so widespread. Today, these figures might need to be modified because of the frequent occurrence of postmenopausal bleeding secondary to estrogen administration. In this particular case, postmenopausal bleeding is the only symptom mentioned which suggests uterine malignancy. The presence of a pelvic tumor, even though it probably was of the uterus, does not suggest carcinoma of the cervix or endometrium. However, we wouldn't be able to exclude the possibility of an endometrial carcinoma without microscopic examination of the endometrium. This thick, yellow, discharge, present for many years, is most likely due to a chronic cervicitis with or without a complicating trichomonas infestation of the vagina and cervix. Certainly it is a common symptom in all women, more frequently in colored than white. We would like to know in this case whether or not microscopic examination of a stained smear from the cervix revealed any specific bacterial organisms, particularly the gonococcus. Even though the vaginal discharge may have been present for years, there may have occurred at any time a new Neisserian infection which might have caused a flare-up of salpingitis, or a new salpingitis. This, in turn, could have produced the picture with which we are confronted. Acute gonorrheal salpingitis with peritonitis used to be seen occasionally (it never was very frequent in comparison with the total number of cases of gonorrheal salpingitis), but is quite uncommon today. If this case were one of gonococcal infection I would expect the response to penicillin to have been rapid; the disease would have been short lived, and would not have been very serious. On the basis then of response to treatment, we can dismiss this possibility.

The patient's temperature was 103.2°, pulse 88, respiration 28, blood pressure 112/74. She was obese and appeared acutely ill. Skin and mucous membranes were very dry. Lungs and heart were within normal limits. From the physical examination we know that the patient was acutely ill and did have relatively high fever. The abdomen was slightly distended and there was generalized tenderness. Apparently this wasn't very marked, as the note is made that tenderness was to deep pressure. No mention is made of rebound tenderness and, if present,

whether or not it was referred to any particular part of the abdomen. Those things we would like to know. Since peristalsis was active we know that the patient did not have paralytic ileus. Tenderness was most marked in the right lower quadrant. This could be compatible with any one of our differential diagnoses: twisted cyst, twisted myoma, appendicitis, or tubo-ovarian abscess that had ruptured. Pelvic examination revealed the cervix to be pulled superiorly and anteriorly. This suggests that something has pushed it in this direction. A uterine myoma could have done so, depending on its location and whether or not it grew intraligamentary to some extent and thereby could make pressure against the cervix, displacing it forward.

The same thing may occur in the case of a pelvic abscess with resultant displacement of the cervix very far forward. I think of pelvic abscess in contradistinction to tubo-ovarian abscess as a separate process from that involving the tubes and ovaries, usually secondary to instillation of infected material into the cul-de-sac — barely encysted at first, but gradually forming a thicker wall to produce a chronic abscess. Sometimes bilateral tubo-ovarian abscesses become confluent by continuity behind the uterus; this would constitute a pelvic abscess. In general, however, a pelvic abscess is one separate from the tubo-ovarian abscess. We would like a little more detail about the pelvic examination to help in differentiating cellulitis from tumor masses. Cellulitis, with a feeling of induration in the broad ligament regions is common in subacute or acute pelvic inflammatory disease. As the active infection subsides, cellulitis disappears and is replaced by fibrous scarring, which is characteristic of a chronic burned out pelvic inflammatory process. More detailed information as to degree of induration, texture of tissues, etc., on pelvic examination, would be very important clinically in evaluating this patient.

The laboratory data doesn't add very much. Any serious infection, e.g. appendicitis of this duration, tubo-ovarian abscess with rupture, of this duration, actively growing neoplasm, etc., could produce this degree of leukocytosis with shift to left, this much elevation of sedimentation rate, etc. On the patient's second hospital day a blood culture was taken, hemolytic streptococci grew in one tube, but the other was sterile. This is information of questionable value.

In view of the patient's downhill course it was felt that surgical intervention offer-

ed her only, and admittedly slim, chance, so that on the 14th day this was done. The uterus was found to be nodular and enlarged, extending four or five cm. above the umbilicus, which confirms our impression that the lower abdominal mass of 14 years duration was a myomatous uterus. The right tube was markedly enlarged, three to four cm. in diameter — which is a new bit of pertinent information. She had signs of generalized peritoneal irritation with pain and tenderness over all her abdomen. If we had been given more information about the rebound tenderness, etc., we might feel a little more confident of whether or not she had generalized peritonitis, as distinguished from peritoneal irritation, incidental to some localized inflammatory process in the right lower quadrant. Unfortunately we don't have this information even after examination at time of operation. In like manner, I would like to know whether or not the tube was continuous with the ovary, and whether the two together formed the inflammatory mass, as is usual in gonorrheal tubal disease that has gone this far.

The appendix could not be visualized, due to dense adhesions and limitations of the anesthetic, which is an unsatisfactory observation. In the right lower quadrant there was about 60 cc. of foul smelling pus. The pus of a tubo-ovarian abscess is very foul smelling, and of a chronic or subacute abscess following a perforated appendix I think you might find the same situation, therefore this observation is not particularly helpful. The operative findings pretty well eliminate twisted myoma or twisted ovarian cyst. We can't eliminate appendicitis because appendicitis neglected and ruptured may spread infection in the pelvis producing tremendous enlargement of a tube or a tubo-ovarian mass, or may even involve both adnexae.

A tubo-ovarian abscess is not as common in women 54 years old as it is in young women, and this is against such a diagnosis. I think that any acute infectious process involving the tubes and ovaries may cause some uterine bleeding, certainly in women of menstrual age it is often the cause of menstrual abnormality. It is not quite so easy to see why a postmenopausal endometrium would be bleeding from an infection around the tube and ovary. Malignancy in the tube does occur and, with no further description of this tube than we have, we would not be able to rule out malignancy of the tube with secondary infection. Carcinoma of the oviduct is very uncommon, how-

ever; I know of no way it can be diagnosed clinically by pelvic examination. The only cases I have seen at operation were not diagnosed until the specimen reached the laboratory because there was an associated infection which dominated the signs, symptoms and gross characteristics of the organ. I believe that the most likely diagnosis in this case is tubo-ovarian abscess which ruptured. I can not exclude the possibility of associated neoplasm from the information at hand. Appendicitis also can not be excluded.

CLINICAL DISCUSSION

QUESTION: Do you feel that the terminating condition here was peritonitis?

DOCTOR BENNETT: If this woman had peritonitis, which was not pointed out in the description given at the operation, I would say she had a septicemia secondary to peritonitis, and died of infection.

DOCTOR HOPPS: The sedimentation rate is said to be very helpful in differentiating between appendicitis and pelvic inflammatory disease. Although this is by no means 100 per cent, in the face of a markedly elevated sedimentation rate, pelvic inflammatory disease would seem to be a more likely diagnosis. Has that been your experience?

DOCTOR BENNETT: I don't have sufficient experience from which to draw a conclusion. I might say though that the same thing is usually true of white blood count; in appendicitis it is lower than it will be in acute gonorrheal salpingitis. In this particular case, the white blood count was not very high. Therefore the sedimentation rate would point one way, whereas the white count would point another. After eight days, sedimentation rate and leukocytosis are no longer much help in differential diagnosis between infectious diseases.

DOCTOR CONRAD: There are two things to bear in mind so far as blood culture is concerned. First is the question of technique; this must be very meticulous. As a matter of fact, what we would like to do would be to organize the laboratory so that we could take the blood cultures ourselves. Under the carefully controlled conditions which we could consistently provide, positive cultures from contamination would be practically eliminated. Secondly, I would like to point out that there are so many, many miles of capillaries separating venous from arterial blood, that a negative *venous* blood culture by no means excludes septicemia. *Arterial* blood cultures are much more significant in this respect and, incidentally, arterial cultures are very easily done.

ANATOMIC DIAGNOSIS

DOCTOR HOPPS: At the time of autopsy, the external appearance was much as described in the protocol. When we opened the abdominal cavity we found approximately one liter of slightly cloudy, orange-yellow fluid with a slightly foul odor. Although this was obviously inflammatory exudate, it was not frankly purulent. The lower margin of the liver extended five cm. below the costal margin at the right midclavicular line. The spleen was enlarged two or three times, and quite firm. The entire colon was moderately distended by gas. The uterus was essentially as described at the time of operation; it extended six cm. above the umbilicus and presented a mass of large, firm nodules. Both oviducts and ovaries were adherent and intimately related to this. The pleural cavities each contained approximately 200 cc. of serous fluid which did not have a foul odor. The lungs were approximately two times enlarged and there was considerable dependent hyperemia and edema. There seemed to be relatively little pneumonia. The heart was moderately enlarged (480 gms.), very soft and flabby. Upon opening the heart, the anterior cusp presented a defect (perforation) in the center which was almost round, approximately 12 mm. in diameter. It extended to within four mm. of the free margin of the cusp and almost to the base. Projecting from the lower aspect of this perforation there was an irregular tongue-like vegetation, apparently of recent origin, friable and of mixed colors, gray and red, representing platelets and erythrocytes respectively. The other two cusps were slightly thickened on their convex surfaces and there were slight mural thrombi here also. This then represented acute bacterial endocarditis. As you know, septicemia is frequently complicated by acute bacterial endocarditis and this was the circumstance here. The cause of this woman's death was septicemia co-existing with peritonitis. The most significant findings relating to cause of this septic process were in the genital organs. The uterus was very large. Together with the adherent tubes and ovaries, it weighed 2975 gms. It was made up of multiple round, firm tumors which had the characteristic appearance of leiomyomata. They varied in size; the largest single one measured 12x7x10 cm. — there were perhaps 20 in all. They presented no significant degenerative changes and nothing to suggest malignant neoplasia, nor was there any evidence of malignant neoplasia in the

uterus, as such. The endometrium was somewhat thickened, slightly granular, and the endometrial cavity contained blood; this was an effect of acute endometritis. Both oviducts were dilated to three or four cm. in diameter and filled with thick purulent fluid. Although the ovary was firmly attached to the oviduct in each instance, it had not become inseparably fused, as is so often the case in gonococcal infection to produce a so-called tubo-ovarian mass. Particularly on the right side the ligamentous structures were fused to the ovary and seemed to be considerably indurated, as a part of this infectious process. Microscopic study revealed that the suppurative process had extended from the oviduct into the ligamented structures and to the immediate proximity of large blood vessels. In all probability the origin of the peritonitis and septicemia was here. Some eight days after a process of this sort is under way it is usually impossible to demonstrate the original minute point of perforation because of fibrinous and fibrous adhesions, marked friability of all tissues in the region, etc.

Now, to summarize these reactions in terms of septicemia which, in final analysis, was the most important change. The effects of septicemia can be classified under three broad headings: 1. Those changes which are *directly related to infectious organisms*. Under this category we have the suppurative foci within the oviducts involving adjacent structures and extending into the peritoneal cavity. There is also the focal destructive lesion involving an aortic valve cusp. 2. Those *effects of toxemia* which are an inherent part of septicemia. In this case, these include the myocardium (parenchymatous degeneration) with considerable fatty change; hyperemia and edema in the lungs (an expression of increased capillary permeability); marked parenchymatous degeneration of the liver, (which incidentally weighed 2560 gm., almost twice the normal) and of the kidneys; considerable atrophy and degeneration of the suprarenal glands, particularly with loss of the lipid content of the cortex. In terms of Selye's adaptation syndrome, the picture is characteristic of the stage of exhaustion. 3. Those changes which express *defense reaction* of the body. Fitting in with this we have splenomegaly; the spleen weighed 440 gm., and exhibited both reticular and follicular hyperplasia. There was hyperplasia of the bone marrow, and shift to the left in leukocytosis. Lymph nodes were hyperplastic and there

was lymphadenitis. Our final pathologic diagnosis was as follows:

1. Chronic suppurative salpingitis, bilateral, with acute endometritis
2. Peritonitis, acute
3. Acute septicemia (hemolytic streptococcal) with septic hyperplasia of spleen, liver, lymph nodes and bone marrow, and acute perforative bacterial endocarditis of aortic valve
4. Hypertrophy of heart with dilatation
5. Parenchymatous degeneration, marked, of heart, liver and kidneys with atrophy and lipid depletion of adrenal cortex
6. Recent wound of operation, abdominal, with fibrinous omental adhesions
7. Hydrothorax, bilateral
8. Hyperemia and edema of the lungs with slight basilar atelectasis
9. Hyperemia of kidney, pancreas and heart
10. Petechial hemorrhages of the stomach
11. Slight hydronephrosis and hydro-ureter, bilateral
12. Partial obliteration of the appendix through muscular hyperplasia
13. Obesity
14. Dental caries
15. Arcus senilis.

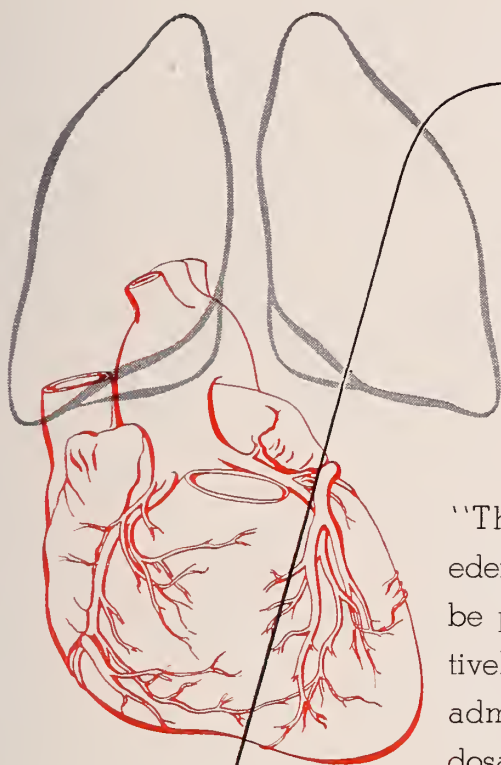
DISCUSSION

QUESTION: Was this correctly diagnosed before death?

DOCTOR HOPPS: The clinical diagnosis in this case was ruptured appendix.

QUESTION: What part did the peritonitis play as a cause of death?

DOCTOR HOPPS: There was a generalized peritonitis. To what extent this had been effected by the penicillin and sulfonamides is hard to say. Clinically, this certainly clouded the issue. One other possibility that must be considered, — for which we have no positive evidence, — is that this could all have been a gonococcal affair. If gonococci had been present, I think that they would not have been recovered by the laboratory, in view of the manner in which this blood was cultivated. Gonococcal etiology would fit in with the salpingitis and also would be more consistent with the type of endocarditis observed, since gonococcal endocarditis is notorious for its destructive characteristics as was observed here. Furthermore, gonococci often involve the aortic valve (as was the case here).



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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

1. Barach, A. L.: Edema of the Lungs, Am. Pract. 3:27 (Sept.) 1948.

President's Page

PROGRESS NECESSITATES CHANGE

The Oklahoma State Medical Association has grown to such size that there is no longer adequate space in Oklahoma City to hold its Annual Meeting except in the Municipal Auditorium.

This change in location, however, offers an opportunity to vary to some extent the nature of the program presented, introduce new features, reactivate others, and in general prepare a more comprehensive program of wider interest.

* The Scientific Works Committee is planning general sessions, panel discussions, movies, scientific exhibits, and television. Especially do we invite your attention to the reactivation of the scientific exhibits. In view of the rapid changes and progress in medicine today they should be of very great educational value.

The new location for the meeting will require some effort on the part of members of the Association to break old habits of attendance and get them out of the hotels of their choice for a meeting place some blocks distant. Your Committee, nevertheless, has assured us that the contemplated program will accomplish even this. We urge you now to make your plans to attend the Annual Meeting in Oklahoma City June 5, 6, 7.

George H. Garrison
President.

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PUBLIC RELATIONS REPORTER

GENERAL PRACTICE IN ENGLAND

On assignment from the A.M.A. Board of Trustees, three deans of U. S. medical schools have completed a two months' study of medical practice in England under the National Health Service Act.

Speaking of the role of the general practitioner in present day England, the report observes that "since the adoption of the Act, the general practitioner no longer has hospital privileges. Nor does he command the direct use of those ancillary departments which have become essential to good medical work, the clinical laboratory, X-ray facilities, etc. He must confine his activities to home calls and office visits.

"The frustration within the field of general practice which was beginning to become apparent under the old panel system has been greatly accelerated by the regulations of the Act."

As a result of this situation, the report adds, "the future of this backbone of the profession is in grave doubt."

Although the general practitioner can take postgraduate training at the expense of the Ministry of Health, the deans found that relatively few men are taking advantage of the opportunity. The reason most frequently given for this is that he cannot practice medicine under present restrictions any more effectively after he takes the course, so why take it. The frustration of the man in general practice under existing circumstances, they state, is by far the most significant defect in British medicine.

NEW INSURANCE PLAN

California Physicians Service has launched a voluntary prepaid medical service to cover the costs of 23 diseases which they term "catastrophic". Cancer, polio, tuberculosis, heart disease and paralysis are included. This insurance pays up to \$5000 for medical, surgical, X-ray and laboratory services for a period of two years and is the first of its kind in the nation.

FEDERAL PUBLIC RELATIONS

There are 3,666 full and part-time public relations men and women employed by the federal government, according to the Chicago Journal of Commerce. Of these, 89 work for Oscar Ewing and the Federal Security Agency.

The total estimated cost of Uncle Sam's public relations runs to \$13½ million a year. The Journal says "The publicists have a common major assignment: To provide the sort of public information which will make governmental activities appear in a favorable light."

LETTERS FROM EWING

It is reported that resolutions against compulsory health insurance which are sent to President Truman are being turned over to the Federal Security Agency.

F. S. A. Chief Oscar Ewing then answers them with a letter "explaining" that the proposed national health insurance program "is not socialized medicine."

Because of this, the Public Policy Committee recommends that in the future resolutions be sent only to Senators and Representatives.

RECOMMENDED READING

Among the current books which are of much interest to doctors of medicine are these. You can secure many of them from local bookstores and libraries or order direct from the publishers.

NINETEEN EIGHTY-FOUR, George Orwell. Harcourt-Brace, 1949. \$3.00. A best-selling novel dealing with the consequences of rising statism.

THE ROAD AHEAD, John T. Flynn. Devin-Adair, 1949. \$2.50. An excellent analysis of controlism and socialism in England and America, by a prominent New Dealer. A paper-bound edition is available for \$.50 from Committee for Constitutional Government, 205 E. 42nd St., New York 17.

ORDEAL BY PLANNING, John Jewkes. MacMillan (Toronto), 1948. \$3.25.

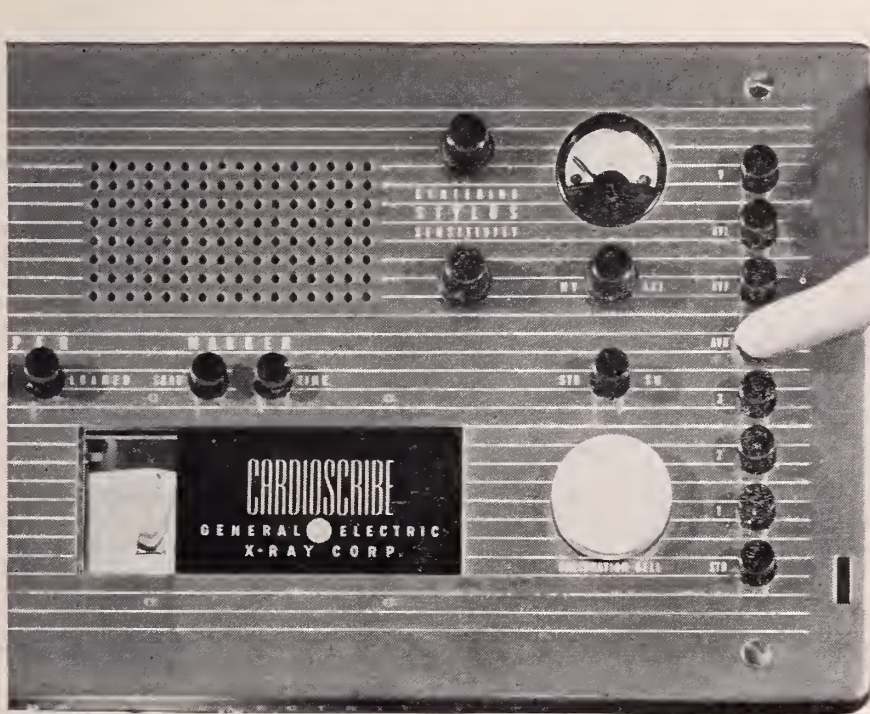
Acute observations on the British experiment by a leading economist.

SOCIALISM IN AMERICA, U. S. Chamber of Commerce. 1950. \$.50. Brief, factual, realistic and very much worth reading. Order direct from U. S. Chamber of Commerce, Washington 6, D. C. Special prices for orders of 2 or more copies.

COMPULSORY MEDICAL CARE AND THE WELFARE STATE, Melchior Palyi. National Institute of Professional Services, 1950. \$2.00. An analysis based on a special study of governmentalized medical care systems on the continent of Europe and in England. Order from publisher at 75 E. Wacker Drive, Chicago 1.

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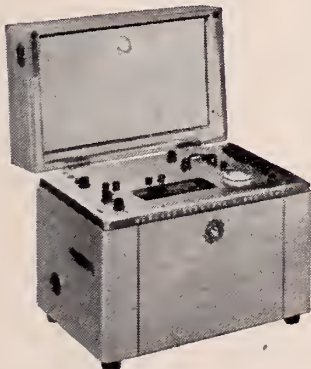


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O.S.M.A. FIFTY-SEVENTH ANNUAL MEETING OUTGROWS HOTELS; TO BE HELD IN AUDITORIUM; WILL FEATURE TELEVISION, MOVIES

Outgrowing available hotel facilities, for the first time in its history, the 57th Annual Meeting of the Oklahoma State Medical Association will be held in the Municipal Auditorium, Oklahoma City. Another significant feature of the 1950 Annual Meeting is the change in dates from May to June 5, 6, and 7.

In the past hotel accommodations have always been one of the most serious problems confronting the meeting and because of the large number of other meetings scheduled for May in Oklahoma, adequate space could not be secured. Both the Skirvin and Biltmore Hotels have promised complete cooperation for the June dates. These new dates will also work to the advantage of the commercial exhibitors as a survey made by the Association indicated that 17 other state medical associations have meetings scheduled for May, 1950, including at least one slated for exactly the same dates as those originally set by the O.S.M.A.

For the first time since before the war, scientific exhibits will figure prominently in the meeting. The scientific work committee has found that much better, more satisfactory scientific exhibits will be available for the June dates since they are not in demand at other points.

Inaugurating a new feature, plans are being developed for the extensive use of television not only for the purpose of bringing surgical and medical procedures to those in attendance at the meeting, but it is also planned, if at all possible, to bring a television show which will be of general public interest and will be broadcast.

Members of the scientific work committee have reorganized the scientific program along the lines physicians showed their preference for in the survey recently conducted by the executive office. Guest speakers have now been invited for the following specialties, ophthalmology; ear, nose and throat; urology; dermatology and syphilology; radiology; pediatrics; internal medicine; neurology and psychiatry; general surgery; obstetrics and gynecology; and orthopedics. Outstanding men in those fields will participate. Additional information on the speakers will appear in the next issue along with a complete program of the three-day meeting.

Roundtable luncheons will again be held this year. The President's Dinner Dance is scheduled for Tuesday night June 6. Council and House of Delegates will meet Sunday, June 4, preceding the scientific program.

In emphasizing that the facilities at the Municipal Auditorium Zebra room will add to the comfort and convenience of the physicians attending the meeting, the committee pointed out that the Auditorium, located in beautiful Civic Center, is within walking distance of all downtown Oklahoma City hotels. Evening social functions, will be held in hotels.

At Journal deadline the majority of commercial exhibit space had been sold and the response was reported as most satisfactory. With unlimited space available in the Zebra Room, scientific and commercial exhibits can be displayed at an advantage and scientific sessions will be improved from the standpoint of space and convenience.

Members of the Auxiliary have planned an extensive program designed to be interesting, entertaining and instructive for wives of physicians attending.

A convenient hotel reservation blank appears at the bottom of this page. Physicians are asked to fill in the blank and return to the Executive Office as soon as possible so that the type reservations desired can be secured. Reservations will be confirmed immediately by the hotels.

O.S.M.A. MEMBERS INVITED TO RHEUMATISM MEETING

W. Paul Holbrook, M.D., Tucson, Arizona, will address the Oklahoma Rheumatism Society on "The Use of ACTH and Cortisone (Compound E)" at the Biltmore Hotel, Oklahoma City, June 4.

Doctor Holbrook will also answer questions at a roundtable discussion at luncheon. Scheduled for the day preceding the scientific sections of the Annual Meeting, all physicians are invited to attend. There will be a small registration fee. Members of the Oklahoma Rheumatism Society are also slated to speak at the session.

Doctor Holbrook, who is now president of the National Arthritis and Rheumatism Foundation, was surgeon general of the air forces during the war. He is an internist. He is a member of the American Rheumatism Association and a former president of that group.

Officers of the Oklahoma Rheumatism Society are E. Goldfain, M.D., Oklahoma City, President; J. R. Staey, M.D., Oklahoma City, secretary; and Sumner Y. Andelman, M.D., Tulsa, vice president.

HOTEL RESERVATION

Clip and Mail to Oklahoma State Medical Association
Reservations Committee

210 Plaza Court Oklahoma City 3, Oklahoma

Arrival date (day and approximate hour)

Length of stay

Accompanied by wife Yes No.

Type of accommodation desired Single Room Double Room.

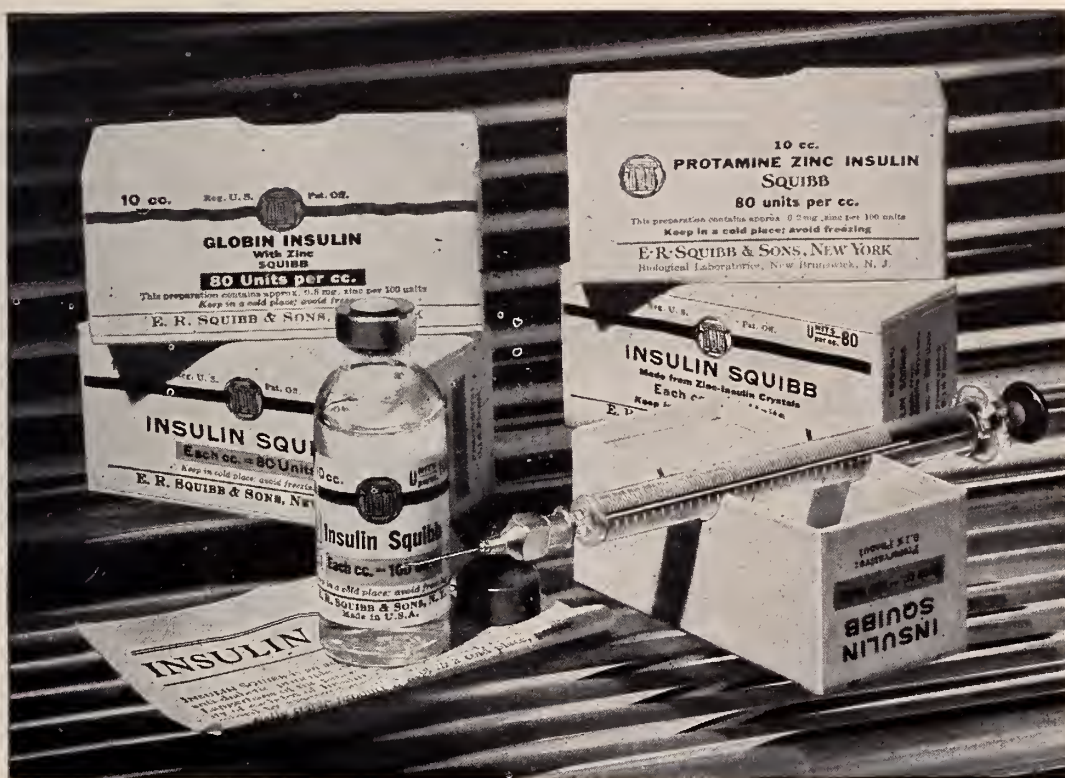
..... Double room with twin beds. Suite. (Check one).

Hotel preference (give first and second choice).

Name, M.D.
(Please type or print name)

Town

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DOCTOR NEWMAN RECEIVES FIFTY YEAR PIN

One of the foremost pioneers in Oklahoma medicine has added another badge of distinction to the many other honors he has received. At a recent meeting of the Northwest Counties Medical Society a 50 Year Pin was presented to Doctor Newman by George H. Garrison, M.D., O.S.M.A. president.

Dr. Newman, who was inducted into the Oklahoma Hall of Fame in 1943, is a member of the Board of Directors of the Oklahoma Medical Research Foundation and has been on the Board of Medical Examiners for several years.

Coming to Oklahoma in 1900, he was in practice first in Old Day County before coming to Shattuck. Dr. Newman was born at Peebles, Adams County, Ohio December 29, 1876. He was graduated from the medical department of the University of the South Sewanee, Tennessee in 1900 and in 1906 attended the medical college of Ohio University at Cincinnati. Dr. Newman has taken approximately 40 postgraduate courses since he began practice with his rule of "at least one postgraduate course a year" interrupted only during the late war.

In 1948 he remodeled and enlarged his hospital for the sixth time. The present building consists of 60 beds with the recent addition completely air conditioned. There are no wards.

A member of the Council, Dr. Newman has always been active in his county and state medical groups. He is a member of the American College of Surgeons. Following service in World War I, he was discharged as a captain. He is a Master Mason, Scottish Rite Mason and Shriner, a member of Odd Fellows, W.O.W. and M.W.A.

ENGLISH PATHOLOGIST TO LECTURE HERE

A lecture of interest to Oklahoma physicians will be given in Oklahoma City April 25 by Dr. H. L. Sheehan, professor of pathology at the University of Liverpool, England.

Doctor Sheehan will speak at 4 p.m. April 25 in the main auditorium of the University of Oklahoma School of Medicine. His subject will be "The Physiopathology of the Pituitary and Clinical Aspects of Hypopituitarism."

He is visiting the United States as one of the guests of the Fourth International Congress on Obstetrics and Gynecology, meeting in New York in May, and is coming to Oklahoma City at the invitation of one of the officials of the Oklahoma Medical Research Foundation.

Doctor Sheehan obtained his Degree of Medicine at Manchester, England, in 1921. He worked several years in the Department of Pathology at Manchester university and visited Baltimore in 1934 with a Rockefeller Medical Fellowship.

He was Director of Research at Glasgow Royal Maternity Hospital from 1935 until 1946, and since then has been at the University of Liverpool as professor of pathology.

His main lines of research have dealt with panhypopituitarism, the toxemias of pregnancy and studies of renal physiology.

Doctor Sheehan is best known to professional men in America because of what is often referred to as "Sheehan's syndrome," the acute pituitary insufficiency as the result of postpartum hemorrhage.



CANCER SOCIETY PLANS CAMPAIGN

The Oklahoma Division of the American Cancer Society held its annual meeting at the Skirvin Hotel, Oklahoma City, March 3 and 4.

Speakers were Dr. Charles S. Cameron and Mrs. Harold V. Milligan from the national office. Also participating in the program were George S. Garrison, M.D., O.S.M.A. President; Dr. Mark Everett, Dean of the University of Oklahoma School of Medicine, and others.

This meeting was concerned with preparations for the April financial campaign, and organizations were perfected for it through the leadership of Henry G. Bennett, M.D., State Campaign Chairman, and Mr. Robert D. Enoch, Campaign Manager, and officials of the Oklahoma Division.

The meeting was attended by county commanders from over the state and a number of interested campaign workers.

Goal set was \$190,000, although it is hoped to exceed that in order to carry on an expanding program of education, lay and professional, service and research. This program is of interest to doctors throughout the state and it is hoped they will lend their active support and participation to the campaign.

OBS.-GYN. CONGRESS SLATED

Sponsored by the American Committee on Maternal Welfare Incorporated, the International and Fourth Congress on Obstetrics and Gynecology will be held May 14-19 at the Statler Hotel in New York.

The registration fee of \$10 includes membership in the Committee on Maternal Welfare and a year's subscription to the committee's official magazine, *The Mother*.

Application blanks may be secured from Leroy H. Sadler, M.D., 1200 North Walker, Oklahoma City. Please do not send the registration fee to Doctor Sadler.

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BOOK REVIEWS

PSYCHOSOMATIC MEDICINE. Edward Weiss, M.D., and O. Spurgeon English, M.D. 803 pages. Second Edition. Philadelphia and London. W. B. Saunders Company, 1949.

The reader will find a comprehensive review of this excellent book in the November, 1943 issue of the Journal. Here the present reviewer stressed the timely note it sounded in the field of internal medicine where a distraught profession struggling with the rapid progress of medical science had neglected the time tried art of practice.

In this first edition the authors rendered a great service by a restatement of Hippocratic principles amounting to a reactivation of an old concept under the stimulating guise of a new name. If the people of this day had been properly indoctrinated in the realm of humanism they would have recalled the fact that one of the errors of Plato's day was the separation of soul and body.

It is heartening to have a second edition of this valuable work. The chapters have been rearranged; a chapter on psychosomatic diagnosis has been added; there are new charts and tables and additional case reports. The strain and stress upon psyche and soma during the late war posed problems and taught lessons which have enhanced the value of this new edition.

The physician who reads this book should be impressed with his responsibility to the patient as a composite whole and intrigued by the absorbing task of intelligently meeting the needs of both body and soul. This book should be constantly before medical students and interns, available to every physician and it should be carefully studied and applied by every general practitioner.—Lewis J. Moorman, M.D.

DIFFERENTIAL DIAGNOSIS OF CHEST DISEASES. By J. J. Singer, M.D., F.A.C.P., F.C.C.P. Lea and Febiger, 1949. pp. 344.

This book, directed primarily at the general practitioner, gives a balanced and inclusive view of all the common abnormalities encountered in the examination of the chest. A special effort has been made to deal with each major thoracic abnormality systematically and coherently, concluding with a section suggesting a basis of differentiation between the abnormality discussed and other conditions with which it might be confused. It is easy to read, is concise and the author is a well known authority.—J. W. Morrison, M.D.

ESSENTIALS OF OBSTETRICAL AND GYNECOLOGICAL PATHOLOGY. Robert L. Faulkner, M.D., F.A.C.S. and Marion Douglass, M.D. Second Edition. St. Louis. The C. V. Mosby Company.

This is the second edition of a textbook which has proved its popularity with the specialist, general practitioner and medical student.

The book is attractively bound, well printed and beautifully illustrated with over 300 black and white studies including three color plates. The microphotographs are unusually clear and well selected.

The material is concise and well presented in a logical manner beginning with an excellent chapter on "The Surgical Specimen".

The second chapter deals with the elements of histology which is of particular value in reviewing for pathological exams in the specialty boards.

The material is then presented by the organ and includes a very concise discussion of local pathological lesions. The illustrations are superb. The discussions are brief and bibliography of non-essential information is obviously omitted. The text includes obstetrical pathology as well.

This second edition contains many additional illustrations and many additions to the original text.

The book should be of particular value to the physician in residency training and to those preparing for examinations by surgical specialty certification boards. The text included only those essentials that the student may be expected to grasp or what the average clinical obstetrician and gynecologist may be expected to easily retain in mind.—Gerald Rogers, M.D.

FOR THE NEW MOTHER. Mildred V. Hardecastle. John C. Winston and Company. Philadelphia.

A cleverly written and unique book which may be the answer to the difficult period of readjustment that each new mother must undergo.

In a breezy and informal way Mrs. Hardecastle offers the new mother practical helps and suggestions in taking care of both the baby and herself.

It covers the period from the first month to the first birthday. What to expect of the baby; how to feed him; what to do in an emergency, all are included, plus suggestions for keeping physically fit, calm, and cheerful during the first year.

The author makes no attempt to write a scientific article, but merely supplementing the advice given by her obstetrician and pediatrician.—Gerald Rogers, M.D.

CLASSIFIED ADS

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The speed, accuracy and economy of Galatest and Acetone Test (Denco) have been well established. Diabetics are easily taught the simple technique. Acetone Test (Denco) may also be used for the detection of blood plasma acetone.

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Lawsley, O. S. & Kirwin, T. J.: Clinical Urology — Vol. 1, 2 Ed., Balt., Williams & Wilkins, 1944 — P. 31.

Duncan, G. G.: Diseases of Metabolism — 2 Ed., Phila., W. B. Saunders Co., 1947 — P. 735, 736, 737.

Stanley, Phyllis: The American Journal of Medical Technology — Vol. 6, No. 6, Nov., 1940 and Vol. 9, No. 1, Jan., 1943.

TWENTY-FIVE YEARS AGO

THE PRESIDENT'S RECEPTION of the next annual meeting at Tulsa, will be held at Akdar Shrine Mosque, Wednesday evening, May 13th.

BECKHAM COUNTY MEDICAL SOCIETY will meet at Sayre on April 7th, in a public meeting, at which a number of speakers from over the state will make addresses.

OTTAWA COUNTY MEDICAL SOCIETY held its monthly meeting at the Miami Baptist Hospital, March 5th, with Dr. P. P. Nesbitt, Muskogee, as the principal speaker.

DR. T. F. GROSS, Lindsay, recently attended the Santa Fe Railroad Physicians and surgeons meeting at Temple, Texas.

THE MIGRATION to the new Medical Arts Building in Oklahoma City has begun, several practitioners having already made the move.

THE WEEDN HOSPITAL, Waurika, which was partially destroyed by fire, has been rebuilt, and newly equipped.

DR. H. K. SPEED, Sayre, was hijacked in his garage last month after returning home in the evening, being relieved of only a few dollars.

DRS. COLWICK AND COLWICK, Durant, are erecting a two story building to be used as a nurses' home, making room for many more patients at their hospital.

SCHEDULE POSTGRADUATE COURSES

*University of Oklahoma
School of Medicine*

Spring — 1950

Apr. 6-7-8, 1950 Course in Abdominal
Surgery

Apr. 17-18, 1950 Course in care of
Premature

June 1-2-3, 1950 Course in Cardiology

All of these courses will be held at the University of Oklahoma School of Medicine in Oklahoma City, Oklahoma. Outside speakers are being arranged for all courses.

Watch for further announcements concerning these courses. Further information may be obtained at the office of Postgraduate Instruction, University of Oklahoma School of Medicine, 800 Northeast 13th St., Oklahoma City 4, Oklahoma.

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OBITUARIES

WALTER W. WELLS, M.D. 1880-1950

Walter W. Wells, M.D., Oklahoma City, died February 14, 1950.

Dr. Wells was born in Osborne, Kansas, in 1880. He moved to Woods county in 1893 and lived there until coming to Oklahoma City in 1907. He was graduated from the University of Oklahoma medical school in 1910 and after being on the medical school staff for many years, he was named professor emeritus in 1946.

He was past president of the Oklahoma County Medical Society, a life member of the Central Association of Obstetricians and Gynecologists and the American College of Surgeons, past grand patron of Eastern Star in Oklahoma, past patron of Oklahoma chapter 10, Alpha Kappa Kappa fraternity, Oklahoma City Golf and Country Club, Men's Dinner club and Oklahoma City Chamber of Commerce.

He was a member of the First Christian Church. Dr. Wells served as a captain in the medical corps in France during World War I.

Survivors include his widow of the home, one sister and one brother.

HARVEY O. RANDEL, M.D. 1894-1950

Harvey O. Randel, M.D., well known Oklahoma City ophthalmologist, died suddenly February 17 at his home.

Dr. Randel was born in Muskogee and began practice in Okmulgee in the 1920's and established his Oklahoma City practice in 1938.

Dr. Randel received his medical degree from Rush Medical College and did postgraduate work at the

University of Pennsylvania, the University of Vienna, and Stanford University, receiving master's degrees from all three.

A past president of the Oklahoma Society of Ophthalmology, a member of the American Board of Ophthalmology, American College of Surgeons, Phi Chi medical fraternity, a 32nd degree Mason and Shriner, a member of the Men's Dinner club, Queensberry club, Oklahoma City Golf and Country club and Elks lodge.

Dr. Randel was a captain in the medical corps of the air force in World War I. He was a member of the Westminster Presbyterian church.

Dr. Randel is survived by his mother, his widow, Ruth Sadler Randel, one son, Dr. Harvey O. Randel, jr., now at the University of Pennsylvania hospital in Philadelphia, a grandson and one brother.

POSTGRADUATE COURSE IN INTERNAL MEDICINE

The fourth circuit of instruction in Internal Medicine, by Robert M. Becker, M.D., opened in Ponca City, Tulsa, Bristow-Sapulpa, Guthrie and Stillwater-Cushing on March 20. This circuit will close May 26.

The enrollments and attendance in the first four circuits have been excellent. Reports from the physicians enrolled have been gratifying to the Committee. Physicians enrolled in this program are urged to bring their patients who are diagnostic or therapeutic problems to the Clinic for presentation and discussion by Doctor Becker and the group.

Information regarding the fifth circuit will be announced in the next issue of the Journal.

An Observation on the Accuracy of Digitalis Doses

Withering made this penetrating observation in his classic monograph on digitalis: "The more I saw of the great powers of this plant, the more it seemed necessary to bring the doses of it to the greatest possible accuracy."¹

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Average maintenance dose: 1 tablet daily.

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1. *Withering*, W.: An account of the Foxglove, London, 1785.
2. *Rimmerman*, A. B.: Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. 209: 33-41 (Jan.) 1945.

Literature giving further details about Digilanid and Physician's Trial Supply are available on request.

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THAT MORE MAY KNOW

That More May Live Longer



Ownership of the Spencer Road Sanitarium was given as an outright gift to the Oklahoma Medical Research Foundation late in February by Coyne Campbell, M.D., Oklahoma City psychiatrist who

founded the hospital two years ago.

Valued at \$250,000, the gift includes nearly eight acres of land, a hospital building, three cottages, a dining hall, kitchen, treatment rooms and a storage building. The sanitarium can accommodate 90 patients.

Doctor Campbell, who has practiced psychiatry in Oklahoma City since 1933, explained that the gift was "without any strings or conditions." In a letter to Foundation officials, he said, "You are free to do with it as you see fit. I am tremendously interested in the Oklahoma Medical Research Foundation and, for some time, I have been contemplating a gift to the Foundation."

"I hope that this gift will enable you, directly or indirectly to do research in the particular fields of medicine in which I am interested. But this gift is without any condition as to the use to which you will put this property."

"It is the largest single contribution the Foundation has yet received," Hugh Payne, general manager, said.

He explained that the Foundation plans to operate the sanitarium as in the past, with its net income going into the general fund of the Foundation.

The sanitarium has functioned with an open staff, and this policy will be continued with the same personnel, Payne explained.

"This is the greatest day in the history of the Foundation," declared Ansel Earp, Oklahoma City businessman who is chairman of the executive committee of the Foundation. "This gift will mean a substantial yearly income to help finance the work of the institute, and we are most grateful," he continued.

Doctor Campbell, who graduated from the University of Oklahoma in 1924 and attended the state university medical school a year before transferring to Rush Medical College at the University of Chicago, will continue his private practice in his clinic at 2920 N. Classen.

He received his medical degree in 1928. After practicing in Frederick, he became assistant superintendent of the Western State Hospital at Fort Supply.

He left his practice in Oklahoma City in 1936 for a year of post graduate work at the Chicago Institute of Psychoanalysis and returned to open a private sanitarium at N. E. 4th and Walnut.

The sanitarium given to the Foundation, located at NE 23 and Spencer road is designed for chronic and convalescent psychiatric patients and alcoholics.

In explaining his gift to the Foundation, Doctor Campbell said, "I always wanted to do medical research, but I got sidetracked into clinical medicine. This gift will compensate partially for my not having done research. Also, I had rather make this gift at the age of 45 and see something come of it than wait until I am 75 to give it. I can now see the fruits of my labor benefit other persons."

The Foundation gift came at the beginning of a Development Fund campaign to provide an additional \$2,500,000 in operating capital for the Foundation. A drive in 30 counties of the state, combined with a statewide effort seeking large gifts was conducted during the late winter months to assure financial security for the Foundation over a 10 year period.

"This gift, which came voluntarily from Doctor Campbell, was of tremendous importance and value as an impetus to the campaign, as an additional benefit," Payne pointed out.

"This gift assures the Foundation of a substantial yearly income, and in addition, gives positive proof to the people of Oklahoma of the great possibilities the Foundation has for benefiting all mankind — it was a wonderfully generous act on the part of Doctor Campbell, and a terrific stimulus to our development program campaign," he continued.

MEDICAL SOCIETIES AROUND THE STATE

PITTSBURG COUNTY

Installation of officers was held at a recent Pittsburg County Medical Society meeting in McAlester. New officers are Thurman Shuller, M.D., McAlester, president-elect; W. P. Lerblance, Jr., M.D., Hartshorne, president; E. D. Greenberger, M.D., McAlester, vice-president; H. C. Wheeler, M.D., secretary-treasurer.

GREER COUNTY

Members of the Greer County Medical Society and the Auxiliary met in Mangum February 13 for dinner and scientific session. W. F. Lewis, M.D., Lawton, lectured and showed slides on complications of floating kidneys.

STEPHENS COUNTY

Dr. and Mrs. F. W. Taylor and Dr. and Mrs. R. A. Ellis entertained the Stephens County Medical Society and Auxiliary at a dinner meeting in the Magnolia room of the Chisholm Trail hotel recently. Following the dinner, Neal Lysnought, M.D., Oklahoma City, spoke to the Society on "Nervous Conditions in Children". A book review, *The Doctor Has Three Faces*, was given by Mrs. E. G. King for the Auxiliary.

CLEVELAND COUNTY

"Workings of Government Medicine" was the topic Basil A. Hayes, M.D., Oklahoma City, used when he addressed members of the Cleveland County Medical Society at a recent meeting.

NORTHWEST COUNTIES

More than 60 physicians and guests of the Northwestern Counties Medical Society attended the meeting in Woodward recently when a 50 Year Pin was presented to O. C. Newman, M.D., Shattuck. Lectures and slide demonstrations on common skin troubles were given by Robert Morgan, M.D. and H. A. Foerster, M.D., both of Oklahoma City. Next meeting of the Society will be held at Mooreland in April. Additional information on presentation of Dr. Newman's 50 year pin appears elsewhere in this issue.

TULSA COUNTY

Monthly buffet suppers preceding the regular monthly meeting of the Tulsa County Medical Society have been instituted. Following the February 27 buffet supper, Paul W. Schaefer, M.D., Kansas City, spoke to the group on "Surgical Problems Relative to the Biliary System and Pancreas". Dr. Schaefer is associate professor of surgery at the University of Kansas School of Medicine. Another February meeting featured R. M. Shephard, M.D., Tulsa chest surgeon and specialist in diseases of the lung. He spoke on "Clinical Differential Diagnosis of Certain Lung Diseases".

ANNOUNCEMENTS

OKLAHOMA STATE MEDICAL ASSOCIATION. June 5, 6, 7. Municipal Auditorium. Oklahoma City.

AMERICAN MEDICAL ASSOCIATION. June 26-30. San Francisco.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30-31, Nov. 1-2, Biltmore Hotel. Oklahoma City.

POSTGRADUATE MEDICAL ASSEMBLY IN ENDOCRINOLOGY. Roney Plaza Hotel, Miami Beach, Florida, April 3-8. Sponsored by the Association for the Study of Internal Secretions and the American Diabetes Association.

AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS. April 22-29. Sherman Hotel. Chicago.

CORPS EXAMINATIONS FOR MEDICAL OFFICERS. May 15, 16, 17. Applications must be received not later than April 17, 1950.

INTERNATIONAL AND FOURTH CONGRESS ON OBSTETRICS AND GYNECOLOGY. May 14-19. Statler Hotel. New York.

NATIONAL TUBERCULOSIS ASSOCIATION. April 24-28. Washington, D. C.

AMERICAN BOARD OF OBS.-GYN. Oral and pathology examinations (Part II) for all candidates will be conducted at the Shelburne, Atlantic City, New Jersey by the entire board from Sunday, May 21 through Saturday, May 28. Candidates for re-examination must make written application by April 1. Applications are now being received for the 1951 examinations.

U. S. CHAPTER, INTERNATIONAL COLLEGE OF SURGEONS. 1950 Assembly October 31, November 1, 2, 3. Cleveland Public Auditorium.

RESOLUTION

WHEREAS, the untimely death of Doctor Duke Vincent has left a void in his community, profession, and in the hearts of his colleagues and his family, and

WHEREAS, his benevolence and wisdom will be keenly missed by all who were fortunate enough to know him during his association with the University of Oklahoma Medical Department and in the practice of medicine, and

WHEREAS, his outstanding personality and willingness to cooperate in any program will be sorely missed at civic and medical meetings,

NOW THEREFORE BE IT RESOLVED, that we the members of the Northwest Counties Medical Society do hereby express our sense of bereavement and furthermore we wish to send the family of our friend and comrade our deepest sympathy, and

BE IT FURTHER RESOLVED that we make known our sentiments and that a copy of this resolution appear in the minutes of the Northwestern Counties Medical Society and that the Oklahoma State Medical Association be notified.

(Signed) Respectfully submitted,
H. M. Newman, M.D.
H. Walker, M.D.
C. E. Williams, M.D.
Resolutions Committee

A BIG TIME-SAVER FOR EVERY DOCTOR



This handy booklet for new mothers was "built to doctors' orders". It contains blank forms for filling in your instructions and formulas.

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HAVE YOU HEARD?

Charles Stephen Stotts, M.D., and Mrs. Stotts, Pawhuska, have returned from a five weeks trip to Mexico.

Leon F. Kinnan, M.D., Medford, discussed the heart and its ailments and the heart fund campaign at a recent Business and Professional Women's club meeting there.

William Bernell, M.D., Hobart, is building a modernistic type 15 room one story clinic building.

R. B. Hayes, M.D., Guymon, has donated a bound copy of the *Illustrated London News* of 1852 to the No Man's Land Historical Museum.

Dean Walker, M.D., son of Roscoe Walker, M.D., Pawhuska, has completed his residency at Bellevue Hospital and is practicing in Tulsa.

Harper Wright, Sr., M.D., Oklahoma City, was recently featured in an article in the *Capitol Hill Beacon*.

Mack I. Shanholtz, M.D., Wewoka, discussed the work of the county health departments at a Rotary Club meeting in that city.

E. M. Henry, M.D., Muskogee, was guest speaker at the meeting of the Muskogee Society of X-Ray Technicians.

Paul Champlin, M.D., Enid discussed cancer research at the Bishopian Club.

G. E. Haslam, M.D., Anadarko, spoke on "Medicine, Eye, Ear, Nose, and Throat" at a Rotarian luncheon there.

C. Riley Strong, M.D., El Reno discussed "Medicine as it Affects You" when he spoke to the Canadian county home demonstration council.

J. P. Braun, M.D. and *J. William Finch, M.D.*, Hobart, are building a new four doctor office building.

E. P. Baker, M.D., Tahlequah, was one of the charter members present recently when the Tahlequah Lions club celebrated its twentieth anniversary.

Morris Smith, M.D., Guymon, is taking a three months post graduate course in surgery at the University of Florida.

M. K. Braly, M.D., and family, Mooreland, have returned from a trip to Puerto Rico.

C. E. Northcutt, M.D., Ponca City, was the principal speaker at the meeting of the Oklahoma Druggists Association held in Pawhuska recently. Dr. Northcutt spoke on socialized medicine as it pertains to the doctor, druggist and patient.

Robert W. Head, M.D., has assumed the directorship of the Choctaw-McCurtain County health department.

R. H. Lynch, M.D., Hollis, was elected county chairman of the Harmon County Democrats.

J. E. Hollis, M.D., Bristow, and *J. B. Hollis, M.D.*, Mangum, attended a reunion of their class at the University of Tennessee recently.

H. K. Speed, M.D., Sayre, discussed the progress made in the medical field during his lifetime at the Kiwanis Club luncheon there recently.

R. K. McIntosh, M.D., has moved into the new Professional Building in Tahlequah.

W. G. Husband, Jr., M.D. and *Jim Billy Parker, M.D.*, have begun construction on a new clinic in Elk City.

DO YOU KNOW?

That dates for the Oklahoma State Medical Association Annual Meeting have been changed to June 5, 6, and 7 with the House of Delegates scheduled for Sunday, June 4! Dates were originally set for May. This year's Annual Meeting will be held in the Municipal Auditorium, Oklahoma City. For further information see President's Page, page 162 and news story page 166.

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MEDICAL ABSTRACTS

ROBERT M. BECKER, M.D.*

CARDIAC DISEASE IN PREGNANCY. Vander Veer, J. B. and Kuo, P. L., Div. of Med., Pennsylvania Hospital, Philadelphia, Pa., *Am. Heart Jour.* 39:2, January, 1950.

An analysis of 409 pregnant women with heart disease (1.5 per cent of all deliveries) delivered at the Pennsylvania Hospital revealed:

1. Fourteen of these patients expired.
2. Congestive heart failure was the main or contributory cause of death in 10 of these 14 patients (71 per cent). In seven of these 10 patients the acute episode of congestive failure took place between the seventh and eighth month of gestation. Death occurred in these 10 patients in from six to 40 hours after delivery with increasing dyspnea, cyanosis and pulmonary edema. The circulatory load was noted to increase steadily from third month to a maximum just before the last month of gestation.

3. Various types of acute infections were responsible for seven of the 14 deaths (50 per cent). In four patients the acute infection precipitated acute congestive failure and death.

4. Fetal mortality in these 409 cardiacs was 13.2 per cent, most common cause of death was prematurity. Six post-mortem caesarian sections were done immediately after death of the mother but none were effective in obtaining a living infant.

5. Decreasing functional capacity of patient's heart beat determined by frequent and careful examination, early failure manifested by tachycardia, dyspnea, moist rales at lung bases; digitalization indicated.

6. Authors strongly recommended careful prenatal observation for signs of early failure in pregnant cardiacs with prompt control of failure by Na restriction, digitalization, aminophylline, O₂ and diuretics as indicated. Also early control of acute respiratory infections.

DEVELOPMENT OF SPERMATOGENESIS IN HYPOGONADISM. Hurxthal, L. M., Bruns, H. J., and Musulin, N., Dept. Int. Med., Lahey Clinic, Boston, Mass., *J. Clin. Endocrinology* 9:1245, December, 1949.

The authors discuss the problem of inducing spermatogenesis in hypogonadism and present five cases of hypogonadotropic eunuchoidism or panhypopituitarism successfully treated with testosterone alone or combined with chorionic gonadotropin. They consider several hormonal variations in hypogonadotropic eunuchoidism: 1. In all cases there must be a deficiency of testosterone or male sex hormone, this deficiency due either to deficient production of luteinizing by the pituitary producing failure of male sex hormone production, or a primary failure of the Leydig (interstitial) cells of the testes to respond to stimulation by LH, or failure of their precursors to become Leydig cells. The authors recommend that in eunuchoidism with testes small but of normal contour and firmness, that a trial of chorionic gonadotropin is worthwhile and if there is a response, testosterone may be substituted. Their patients were aged 21, 25, 18 and 43 years of age, photographed showing characteristic Froelich syndrome physiques with hypogonadism, all with obvious improvement after treatment, consisting of testosterone propionate IM 25 mgs. ever three to five days for several months to a year, followed by methyltestosterone orally 10-30 mgms. daily. Satisfactory spermatogenesis

was established in four of the five cases. Sustained improvement was noted for several years after cessation of all therapy in some cases.

DERMATITIS FOLLOWING THE USE OF PYRIBENZAMINE AND ANTISTINE. Sherman, W. B., and Cooke, R. A., Div. of Allergy, Roosevelt Hospital, New York City 19, *New York Jour. of Allergy* 21:63, January, 1950.

Proven allergic contact dermatitis due to Antistine eyedrops and Pyribenzamine ointment are reported by the authors. Sensitivity to these antihistaminic drugs in two patients was proven by clinical observation and patch skin testing.

PITUITARY MYXEDEMA: REPORT OF 3 CASES. Tucker, H. St. Geo., Jr., Chitwood, J. L., Parker, C. P., Jr., Med. Service, McGuire Vet. Adm. Hosp., Richmond, Va. *Ann. Int. Med.* 32:52, January, 1950.

Means et al originally described "Pituitary Myxedema" in a group of patients who manifested evidence of wide-spread glandular deficiencies (adrenal, gonadal, etc.) as well as hypothyroidism and who did not respond well to thyroid treatment. The authors report three patients with anterior pituitary failure masquerading as myxedema. Besides the obvious myxedema, the patients manifested varying degrees of hypogonadism and adrenal insufficiency. In contrast to Means original observations, this group reports that with "adequate thyroid administration, all findings of myxedema were relieved in each case." Doses of desiccated thyroid ranged from two to three grs. daily. It was concluded that the thyroid therapy was more successful when combined with testosterone, desoxycorticosterone and salt when indications of gonadal and adrenal cortical insufficiency respectively, were present. The primary pituitary lesion in each of their cases seemed to be a chromophobe adenoma.

CHOLESTEROL CONTENT OF THE CORONARY ARTERIES AND BLOOD IN ACUTE CORONARY ARTERY THROMBOSIS. Morrison, L. M., and Johnson, K. D., Dept. Int. Med., Los Angeles County Hosp., Los Angeles, Calif., *Am. Heart Jour.* 39:31, January, 1950.

Significantly increased amounts of cholesterol were found in the coronary arteries and blood of eleven patients who died of coronary thrombosis, as compared to a control group of 25 patients of similar age group who died of diseases other than coronary thrombosis. The authors conclude that a disturbance in lipid metabolism is a factor in the pathogenesis of atherosclerosis.

TREATMENT OF PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA WITH LANATOSIDE C. Barrow, G. J., Atlanta, Ga. *Ann. Int. Med.* 32:116, January, 1950.

Twenty-six patients with paroxysmal supraventricular (auricular or nodal) tachycardia, who had been unsuccessfully treated with vagal stimulation (carotid sinus and ocular pressure, gagging and Valsalva maneuver), were all successfully treated with rapid digitalization, intravenous Lanatoside C, usual dosage of 1.2 mgm. given over a period of 1 to 2 minutes. If in 30 minutes, the abnormal rhythm was not converted to normal, an additional 0.4 mgm. was given IV. Time required for conversion to normal varied from two to 85 minutes, average being 19 minutes. No significant toxic reactions were noted.

*Postgraduate Instructor in Internal Medicine.

OFFICERS OF COUNTY SOCIETIES, 1950*

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	Jack F. Parsons, Cherokee	John X. Blender, Cherokee	Last Tues. each Secoud Month
Atoka-Bryan-Coal- Johnston.....	B. B. Coker, Durant	Roger W. Witt, Durant	
Beckham.....	H. K. Speed, Sayre	V. R. Payne, Cheyenne	Secoud Tuesday
Blain.....	C. L. Rogers, Canton	Virginia Curtin, Watonga	Third Thursday
Caddo.....	Paul Smith, Carnegie	E. T. Cook, Jr., Anadarko	Third Thursday
Canadian.....	Joseph H. Goldberger, El Reno	Jack W. Myers, El Reno	Subject to Call
Carter.....	Pat Lawson, Marietta	Ethel M. Walker, Ardmore	Secoud Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	First Tuesady
Choctaw-McCurtain- Pushmataha.....	Floyd L. Waters, Hugo	H. D. Wolfe, Hugo	
Cleveland.....	James F. Hohl, Norman	James O. Hood, Norman	Fourth Thursday
Comanche.....	Lawrence W. Ferguson, Lawton	Charles Graybill, Lawton	Secoud Tuesday
Cotton.....	Willard L. McGraw, Walters	Mollie Seism, Walters	Third Friday
Craig-Ottawa.....	L. P. Hetherington, Miami	J. E. Highland, Miami	
Creek.....	J. F. Curry, Sapulpa	Walter Cale, Sapulpa	Secoud Tuesday
Custer.....	C. B. Cunningham, Clinton	J. B. McGolrick, Clinton	Third Thursday
Garfield-Kingfisher.....	Charles J. Roberts, Enid	Roseoe C. Baker, Enid	Fourth Thursday
Garvin.....	Jesse R. Waltrip, Pauls Valley	John R. Callaway Pauls Valley	Wed. before 3rd Thur.
Grady.....	Anrou Little, Chickasha	B. M. McDougal, Chickasha	Third Thursday
Grant.....	J. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Greer.....	David Fried, Mangum	J. B. Hollis, Mangum	2nd Mon. Ea. Mo.
Harmon.....	Russell Lynch, Hollis	Robert Srigley, Hollis	First Wednesday
Haskell-LeFlore.....	N. K. Williams, McCurtain	G. M. Hogaboom, Heavener	
Hughes.....	L. A. S. Johnston, Holdenville	Gene Slagel, Holdenville	Third Tuesday
Jackson.....	Willard D. Holt, Altus	Malcolm Mollison, Altus	Last Monday
*Jefferson.....			Secoud Monday
Kay-Noble.....	J. W. Francis, Perry	W. H. Cooper, Ponca City	Secoud Thursday
		C. D. Northcutt, Ponca City, Executive Secretary	
Kiowa-Washita.....	M. Wilson Mahoue, Hobart	William Bernell, Hobart	First Wednesday
Lincoln.....	Harold T. Baugh, Meeker	Glenn S. Collins, Prague	Third Tuesday
Logan.....	Phillips R. Fife, Guthrie	John Souter, Guthrie	
McClain.....	Paul Obert, Purcell	W. C. McCurdy, Jr., Purcell	
Muskogee-Sequoyah- Wagoner.....	Carson L. Oglesbee, Muskogee	Virgil D. Mathews, Muskogee	First Tuesday
Northwestern.....	E. A. McGrew, Beaver	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	M. L. Whitney, Okemah	Dayton Rose, Okemah	2nd Mon. Ea. Mo.
Oklahoma.....	John F. Kuhn, Oklahoma City	Ralph Smith, Oklahoma City	Fourth Tuesday
		Mrs. Muriel Waller, Exec. Secty.	
Okmulgee.....	M. L. Peter, Okmulgee	S. B. Leslie, Okmulgee	Secoud Monday
*Osage.....			Third Thursday
Payne-Pawnee.....	M. L. Saddoris, Cleveland	J. H. Rollins, Pawnee	Third Friday
Pittsburg.....	William P. Lerblance, Jr., Hartshorne	H. C. Wheeler, McAlester	Third Friday
Pontotoc-Murray.....	E. R. Muntz, Ada	C. P. Taylor, Jr., Ada	1st and 3rd Wed.
Pottawatomie.....	C. C. Young, Shawnee	Clinton Gallaher, Shawnee	Third Wednesday
Rogers-Mayes.....	Paul B. Cameron, Pryor	P. S. Anderson, Claremore	Third Wednesday
Seminole.....	J. D. Wood, Seminole	Maek Shanholtz, Wewoka	Third Wednesday
Stephens.....	W. R. Cheatwood, Duncan	Fred W. Taylor, Duncan	Third Wednesday
Texas.....	G. A. Hopkins, Guymon	W. N. Oxley, Texhoma	
Tillman.....	J. E. Arrington, Frederick	O. B. Bacon, Frederick	
Tulsa.....	Fred E. Woodson, Tulsa	John G. Matt, Tulsa	Secoud and Fourth Monday
		Mr. Jack Spears, Exec. Secty.	
Washington Nowata.....	R. C. Gentry, Bartlesville	R. J. Bogan, Bartlesville	
Woods.....	D. B. Ensor, Hopeton	W. F. LaFou, Alva	2nd Wed. Odd Months

*Secretaries of the counties left blank in the above listing are asked to send in a list of their officers to the Executive Office, 210 Plaza Court, Oklahoma City, as soon as possible so that all counties may be included in the next issue.

STATE BOARD OF HEALTH

Grady F. Mathews, M.D., Oklahoma City.

(Number after name indicates years to be served.)

Arnold Schwallisch, Engineer, El Reno (9); M. L. Whitney, M.D., Okemah (8); C. R. Rountree, M.D., Oklahoma City (7); Bert Loy, Hospital Administrator, Oklahoma City (5); A. G. Reed, D.O., Tulsa (4); Charles Ed White, M.D., Muskogee (3); Otto Whiteneck, D.D.S., Enid (2); T. H. McCarley, M.D., McAlester (9); Roy L. Fisher, M.D., Frederick (4).

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COMMITTEE ON STANDARDIZATION

(As approved by the Crippled Children Act)

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I. F. Stephenson, M.D., Alva, Vice-Chairman.

Joe N. Hamilton, Secretary, 805 Midwest Bldg., Oklahoma City.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

TUBERCULOSIS IN THE BROAD FIELD OF RESEARCH

Tuberculosis research has been on a long, long trail, a "dark and devious journey" with only an occasional flash of light, giving to those who were fortunate enough to strike the flint, a bright immortality. Hippocrates without historical background must have done considerable clinical research, both developmental and applied, before his fundamental description of the disease appeared. Aretaeus could not have clarified and amplified this description seven hundred years later without similar research. Galen's keen mind must have been engaged in clinical and climatological research long before he decided to send his jaded Roman patients with "ulcer of the trachea" to the balmy zones about Vesuvius, where they could rest on the most beautiful beach in the world with warm milk from contented cows brewed by the herbiage on the slopes of milk mountain, which according to Galen, was peculiarly favorable for the production of therapeutic milk. It required research for Franciscus Sylvius (17th Century) to gather up the lost threads and to strengthen the frail fabric with his pathological concepts and his more specific definition of "tubercle".

In this vein the golden thread of truth can be followed throughout the ages with valuable accretions from time to time through the untiring efforts of research workers, whether historical, social, statistical, epidemiological or basic. But for the sake of brevity the story must move rapidly with obvious omissions yet with sufficient continuity to show that while in the 17th Century tuberculosis mortality was running high in Great Britain, the spirit of clinical research descended upon certain members of the medical profession thus initiating three successive centuries of critical endeavor. Here the golden thread may be discovered running consistently through the zig-zag course of controversial issues with the constant acquisition of new truths. To mention only a few important workers in

this British group we list Bennet, Willis, Sydenham, Morton, Marten, Stark, Carson, Beddoes, Baillie, Bodington and Budd.

These workers believed in the communicability of tuberculosis; they charted its clinical course and added to the knowledge of its pathology; they established the rest cure and advocated artificial pneumothorax. In the limited light at hand it is astonishing how well this group of British workers prepared the way for the more formal and basic research across the channel beginning with Auenbrugger in the middle of the 18th Century. The meticulous striving of Auenbrugger for the perfection of percussion, his *Inventum Novum* and its belated popularization by the ingenious industry of Corvisart and Laennec and the further clinical and pathological advances of the French group are so well known, a detailed description of their remarkable investigations is unnecessary.

Important contributions were made by Corvisart, Bichat, Bayle, Louis Laennec, Piorry and Villemin. Most remarkable are the phenomenal results of Laennec's clinical researches and Villemin's proof of the communicability of tuberculosis by animal inoculation. This was only a short time before Brehmer and Trudeau, following Bodington's lead, developed sanatorium management and only 15 years before Koch discovered the tubercle bacillus. In the effulgent light of this phenomenal discovery, Villemin's brilliant accomplishment was almost forgotten. This identification of the specific cause of tuberculosis tagged the tubercle bacillus as a nefarious killer and caused Koch to continue his research with the hope that his old tuberculin might forever thwart the enemy's destructive powers. But he was doomed to disappointment. While his tuberculin proved not to be curative, it was found to have important diagnostic possibilities. It was natural to conclude that since the specific cause of tuberculosis was known, the

ubiquitous bug could be tracked down and shot on the spot, but Koch had not found the deadly ammunition. The man-eating lion could be trailed to his lair and promptly dispatched but not the tubercle bacillus.

Though continued research has extracted many of the wary bug's secrets, it continues to demand its "pound of flesh". Through its own unexplained but ingenious powers of adaptation it develops an effective armor against even the most promising chemotherapeutic agents.

Koch's discovery of the tubercle bacillus and his failure to develop a cure resulted in a continuous, concerted effort to gain additional knowledge and to find more effective methods of control while hopefully awaiting a cure. At the turn of the 19th Century, relatively aloof from the current materialistic urge, physicians pooled their convictions, their knowledge, their skills and their influence in the broad field of tuberculosis research which more recently has been directed chiefly toward the discovery of therapeutic ammunition. Though modern chemotherapy has caused the enemy to run for cover, often leaving the field of battle in a peaceful calm, the cunning bacillus may soon return with the pride and power of a newly acquired resistance.

Side by side, all over the world this baffling bacillus and the research workers are fighting it out in the laboratory, in the clinic, in the sanatorium and in the field of general practice with the finish far in the future.

Those who doubt the mounting interest in this disease and the resulting research have only to check the Index Medicus and the quarterly index over a period of years. According to recent statistical studies approximately seven million dollars were spent in research on tuberculosis in the United States during a 12 month's period in 1947-48.

It may be said just as in the failure of Koch's tuberculin the therapeutic limitations of streptomycin have stimulated research, and that successive disappointments in the field of specific therapy will result in the additional expenditure of fabulous sums.

There is a universal feeling that there must be some way to rob this bypassing bug of his bag full of tricks.

Perhaps it is not too much to hope that the tubercle bacillus may place its stimulating stamp upon an inquiring genius in the field of research who will not stop short of

the answer. How wonderful if Oklahoma's own Research Foundation might carry the torch.

1. Brown, Lawrason. *The Story of Clinical Pulmonary Tuberculosis*. Baltimore, Williams and Wilkins Company. 1941.
2. Cameron, Virginia. *Analysis of Allocations in 1947-48*. *The American Review of Tuberculosis*. 60:4:393 (October) 1949.
3. Cummins, Prof. S. Lyle. *Tuberculosis in History*. Baltimore. The Williams and Wilkins Company. 1949.
4. Long, Esmond R. Editorial, *The Cost of Tuberculosis Research*. *The American Review of Tuberculosis*. 60:4:527. 1949.
5. McLeod, Higgins H., and Corwin, Hinshaw H. *Streptomycin and Dehydrostreptomycin in Tuberculosis*. N.T.A. 1949.
6. Moorman, Lewis J. "Our Knowledge of Tuberculosis 4,000 Years Accumulation—40 Years Application". Presidential Address. *Transactions of the Fortieth Annual Meeting. American Tuberculosis Association*, 1944.

CHEMOTHERAPY

In the 1950 issue of *Medicine of the Year*¹, which should be on the desk of every practicing physician for ready reference, much authentic knowledge appears in concentrated form ready for immediate application.

Among the interesting gleanings from the year's progress is the brief discussion of "Chemotherapy and Antibiotics". Disregarding limited space, the following pertinent lines are being quoted for the benefit of those who may not have this second issue at hand.

"It has been further experienced that the use of the chemotherapeutic and antibiotic drugs has not lessened the necessity for adequate drainage of definitely established suppurative foci in the ear, mastoid, nasal accessory sinuses, pharynx or neck. As previously anticipated, the bubble of penicillin 'mist' has burst and become a 'myth.' It has proved to be of little or no value in the treatment of sinus disease, and the use of these agents by local instillation in sinus disease, has left much to be desired. Nor does sinus disease respond to parenteral use after the stage of suppuration has passed. There seems to be little justification for the current enthusiasm in regard to penicillin when used locally in the mouth and throat. The increasing number of angry red, extremely sore throats from the local 'prophylactic' use of this agent attests to its possible hazards and abuse. An admonition seems timely in regard to the possible injurious effects in the absence of infection. The normal bacterial flora of the throat may be altered to include harmful organisms. It is to be emphasized also that prolonged employment of the antibiotic may produce resistant organisms which fail to respond to therapy at some future time when the effect is sorely needed. The greater palatability of the

lozenge has not increased its effectiveness in combating tonsillitis and pharyngitis. There is sufficient clinical evidence, however, to support the contention that its systemic administration is of distinct advantage in the treatment of acute tonsillitis, Plaut-Vincent's infections and in combating the possible extension of retropharyngeal, peritonsillar and neck infections. It is also obvious that when suppuration supervenes in these conditions, adequate surgical drainage becomes a must."

In the promiscuous employment of penicillin lozenges the possibility of a painful local reaction with fiery red mucous membranes should not be forgotten. Neither should the occasional distressing and disabling allergic reactions be lightly overlooked.

These brief remarks may cause the thoughtful members of the profession to reconsider the possibility of overworking and even wasting valuable and costly chemotherapeutic and antibiotic agents by employing them without clear cut indications. It must be admitted that the field is wide and decisions often difficult.

In the 1950 "Current Therapy"² the index lists the use of penicillin in 76 diseases and conditions in addition to a dozen sub-listings under syphilis and an equal number under pre-operative and post-operative conditions.

Truly there is great need for careful diagnostic studies, sound appraisals and wise decisions in the therapeutic applications of these remarkable remedies.

1. Medicine of the Year. Editorial Direction by John B. Youmans, M.D. Philadelphia. J. B. Lippincott Company. 1950.
2. 1950 Current Therapy. Edited by Howard F. Conn, M.D. Philadelphia. W. B. Saunders Company.

AIMS

Strange to say, this is an alphabetical abbreviation for an organization known as the Association of Internes and Medical Students. According to reports coming from eastern compuses this organization has as its object the advancement of students. An editorial in "Philadelphia Medicine" indicates that such an association is now operating in three of Philadelphia's five medical schools. These student organizations are affiliated with the International Union of Students with headquarters in Prague, Czechoslovakia.

It is doubtful if Ameican students so organized have ulterior aims but people with mature minds and a reasonable knowledge of present trends can see red in the innocent

sounding abbreviation and they cannot imagine the theme of such an organization finding expression in "God Bless America".

It is inconceivable that our own medical school in the freest section of the last free country in the world could harbor such an association. But we stand alerted and we pray that our students enjoying opportunities and facilities provided by the taxpayers of the state will appreciate their blessings and treasure their freedom and keep themselves aloof from entangling connections with international bodies of questionable birth. It is difficult to believe that midwest medical students having been brought up in the pure atmosphere of unadulterated Americanism would ever take the risk of contamination by the sulfurious fumes so often arising in the course of European politico-socio-economic unrest. Good Americans will never capitalize questionable aims.

THE AMERICAN CANCER SOCIETY AWARD

On behalf of the members of the State Medical Association *The Journal* congratulates Doctor Everett S. Lain, the worthy recipient of the 1950 American Cancer Award Medal. The choice of Doctor Lain for this honor was based upon his nomination by the Oklahoma Division of this society "in recognition of his important contributions to the control of cancer."

Though Doctor Lain received the award he will be the first to give credit to all physicians, nurses and non professional workers who have participated in the work of the Oklahoma Division of the American Cancer Society.

Reproductions of the bronze medal and the certificate of award received by Doctor Lain are published elsewhere in *The Journal*.

CANCER PACKAGE LIBRARY NOW AVAILABLE

Reprints on cancer covering the majority of articles published in the past 10 years are now available through a package lending library of the national office of the American Cancer Society, 47 Beaver Street, New York 4, N. Y.

Available to doctors and research workers requesting it, the service is sent post paid with the individual requesting the reprints paying the return postage. Reprints should be returned within two weeks. Physicians are urged to be as specific as possible, avoiding general requests. For example, the volume of materials on cancer of the thyroid is obviously very great and to mail material of this bulk is impractical. However, if cancer of the thyroid-radioactive iodine as treatment is specified, the objectives of the reprint library would be served.

SCIENTIFIC ARTICLES

DIAGNOSIS AND TREATMENT OF SINUS AND SO-CALLED SINUS DISEASE*

CHAS. D. BLASSINGAME, M.D.

MEMPHIS, TENNESSEE

As the title of our paper suggests, we will discuss the diagnosis and treatment of sinusitis and its differential diagnosis from those allied conditions which may stimulate sinusitis clinically. The presence of a post nasal drip or the occurrence of an attack of sneezing does not necessarily imply that a patient will have sinusitis the rest of his life. Neither should an acute head cold be dismissed with the time worn expression that a head cold if treated will get well in one week, and if not treated will recover in seven days. An insight into the diagnosis and treatment of sinusitis and the allied conditions can best be visualized by the following classification. 1. The common virus head cold. 2. Bacterial infections of the sinuses, acute and chronic. 3. Nasal allergy. While these three conditions are separate and distinct clinical entities, there are many instances in their symptomology suggesting a similarity in origin and their true differentiation can only be established by their individual analysis.

The common cold itself is an ill-defined clinical syndrome, which is thought to arise as a result of infection. The infection which causes the cold, upon experimental and clinical grounds, is now conceded to be a filterable virus.

It is necessary to determine if a given cold is due to an infection or merely represents a nasal reaction resulting from some less harmful cause. Many surgical operations have been postponed unnecessarily because of symptoms brought about by a change of weather or an emotional upset.

The clinical picture of a cold is as follows: The incubation period is from a few hours to three days. The onset is often characterized by a sensation of irritation and fullness in some part of the upper res-

piratory tract, commonly the naso-pharynx. At first, there may be an attack of sneezing, followed quickly by a copious nasal discharge. There may be chilly sensations, headache, malaise, non-productive cough and vague aching of the extremities. The temperature may range up to 101°F. Physical examination reveals that the nasal mucosa is swollen and red, the nostrils are more or less occluded, the conjunctiva is injected, the pharynx shows some inflammatory reaction. The upper cervical glands are usually tender and slightly enlarged, the hearing is impaired and the sense of smell is diminished. At first the nasal discharge is watery, later becoming viscous and ropery. It may eventually become purulent. If complications do not develop, the attack does not last longer than a week. Marked variations, in the course of the disease may occur both in duration and severity. In the milder forms it may be mistaken for the syndrome brought about by changes in the weather, emotional storms, etc.

As to the treatment of a virus cold; when symptoms and physical signs are definitely established, the patient should be put to bed from one to three days, depending upon the severity of the infection. There is no effective treatment except that which is directed toward the relief of symptoms, the comfort of the patient and the promotion of the normal functions of the body and the physiology of the nose. As yet there is no known antibiotic or chemotherapeutic agent. Each physician is at liberty to choose his own favorite sedative for relief of symptoms and catalytic agent to stimulate more effective metabolism.

At the termination of the active part of a virus cold, say at the fifth or seventh day, patients will have accumulated, in the maxillary sinuses, serous exudate, mucoid material and desquamated epithelium, which in

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association May 17, 1949.

a majority of instances will be spontaneously discharged from the nose and the patients promptly recover from the attacks. Many of the patients, however, are unfortunate in that the exudate remains in the antra and becomes a source of chronic local and metastatic infection. It is this group of viral colds, which inadequately treated, constitute a large percent of the cases of chronic sinusitis. In the presence of this critical stage of the disease, it is mandatory that the retained secretions be removed from the maxillary sinuses. In the ordinary run of cases of this character, one or two irrigations will suffice to insure a complete recovery.

Acute bacterial sinusitis, in some instances, may result primarily from the bacteria ordinarily prevalent in the nasal passages. In a much larger percent of cases, however, the infection is superimposed upon a viral cold infection which seems to offer a favorable environment in which the bacteria develop most luxuriously.

The physiology of the nose is such that a static relationship between the bacteria which are present in the nose and the epithelial cells with which they come in contact cannot be established without an intermediary agent to initiate the first step in an inflammatory reaction viz. injury to the tissue cell. In this instance, the virus has introduced the initiating injury factor which enables the epithelial cells to attack the bacteria which are immediately present, involving them in the progressive steps of an inflammatory episode, resulting in the production of pus and tissue reaction characteristic of infection. This significant phase of bacterial invasion may occur either in the active part of a virous infection or in the subacute phase when the antral mucosa is waterlogged by the residual exudates which have unfortunately remained in the maxillary sinus.

The treatment of acute bacterial infections, except in the fulminating types, which will be discussed, subsequently, under a separate heading, is similar to that of the viral cold with one important exception — that being with reference to the use of antibiotics and chemotherapeutic agents. These drugs have a useful place in treating bacterial sinusitis if given in the invasive stage of the disease. As in the virus cold, a large majority of patients having bacterial infection in the sinuses will completely recover by discharging the contents of their sinuses in the normal way. Quite a large percent,

however, will be found to retain pus over a variable length of time, manifesting a tendency toward chronicity. It is these cases which become the particular problem of the rhinologist. Unless adequate measures are employed to eliminate the pus from the maxillary sinuses and at the proper time, recurring attacks are encouraged which, if repeated too often, eventuate in chronic pansinusitis.

My practice for the past 20 years has been to irrigate this material from the maxillary sinuses, preferably at the time the acute stage has subsided, that is the seventh to the tenth day. Unfortunately many cases do not present themselves for two to several weeks following the acute attack. Those cases seen at the proper time usually require but a single irrigation, while those seen one month to six weeks following the primary attack require three to five irrigations.

Chronic bacterial sinusitis, in many instances, settles upon a patient quite unaware. Following repeated acute viral or bacterial infections, retaining pus in their maxillary sinuses in each instances over a variable length of time the significance of the sequence of events is not appreciated and chronic sinusitis established itself. It is not suspected until associated illnesses suggest an investigation of the sinuses. For example, I have examined patients with various illnesses, associated with continuous fever, malaise, focal infection syndromes, chronic bronchitis and even simulating tuberculosis who were later proven to be suffering only from systemic reactions resulting from residual infection in the maxillary sinuses following acute sinus attacks, all local signs being absent between attacks. I have known patients, who, after a sojourn in tuberculosis institutions were finally diagnosed as sinusitis which had at first been overlooked.

The diagnosis of sinusitis in the chronic and pre-chronic stages is made by the history and physical findings. In the first place, the history must be studied most rigidly. A head cold may have been experienced two to six or eight weeks previously, yet the patient has forgotten all about it until urged to refresh his memory, then he will recall having had a cold to which he paid slight attention at the time, but when examined realizes his present trouble dated back to that cold. A persistent cough can in 90 per cent of cases be traced to a primary head cold which resulted in the accumulation of a residue of pus or mucopurulent material

and will be quickly relieved by evacuating the residual material.

Clinicians are becoming more and more aware that the history obtained in cases of chronic sinusitis is, in many instances, intimately related to the complications of the sinus disease so that the complicating conditions alone suggest the diagnosis of primary sinusitis.

My concept of this relationship between sinusitis and chest diseases developed some 20 years ago as a result of my experiences with a chest specialist whose private offices adjoined mine. He was superintendent of a large tuberculosis sanitarium. As a result of a serious automobile accident, he sustained a fracture involving the left antrum, resulting in a chronic infection of that sinus. As a further complication, he developed chronic bronchitis. He would not consent to any surgical procedure for relief of his sinusitis and bronchitis, therefore, it was found necessary to irrigate his antrum over a long period of time. During each of these irrigations, large quantities of pus were washed out. In the meantime, it became increasingly obvious that his bronchitis was severe whenever the antrum was not irrigated and that the bronchitis was invariably improved immediately following an irrigation. As the result of this personal experience, he subsequently began to suspect that a large group of his patients suffering from chronic coughs, many of whom were suspected of having tuberculosis, were in reality experiencing the secondary complications of chronic sinusitis. Upon irrigation of the maxillary sinuses, in this group of cases, I was able to confirm his diagnosis by demonstrating pus in the antral washings with subsequent alleviation of symptoms of the chronic bronchitis.

The history of headaches can be associated with chronic sinusitis only when it can be demonstrated or assumed that pressure factors are present to account for the symptoms.

The physical findings, when present, upon which a diagnosis of chronic purulent sinusitis may be postulated, is the presence of inflammatory reaction in the nasal membranes over the areas corresponding to the suspected sinus or sinuses and the demonstration of pus or other products of infection in the nasal passages, in the pharynx or in the sinuses. The presence of pus situated on the posterior pharyngeal wall is pathognomic of purulent sinusitis. Pus found lying on the floor of the nasal passages also

confirms the presence of purulent sinusitis.

Transillumination and X-ray pictures each has its value in the diagnosis of sinusitis.

Pus or any of the products of inflammation found in the sinus cavity is, obviously, a clear indication of the presence of sinus pathology. Removal of pathologic material from the maxillary sinuses presents a major problem in the diagnosis and management of sinusitis. No diagnosis of maxillary sinusitis, in the subacute or chronic phases, is complete without an irrigation of the contents of the sinuses and a careful inspection of the products of the irrigation. It is my practice to irrigate these sinuses routinely for diagnostic purposes, by way of the normal or accessory ostia. If the irrigating fluid returns entirely clear, it is the best indication one can obtain that the sinus is free from disease due to either infection or allergy. If, on the other hand, there are shreds of mucous, mucoid material, serous, mucopurulent or purulent material, it is evidence of an unhealthy condition of the mucosa of the sinus being examined. Although I irrigate by way of the normal ostium, I by no means wish to discount the antral puncture or any other effective method. If one has not attempted and developed the method by way of the natural ostium, I would insist on his using the puncture method routinely. The strongest argument for the natural ostium technique is its simplicity and its effective adaptation on a universal scale for diagnosis and treatment in sinusitis.

There are complications which not infrequently present themselves in the course of acute and subacute bacterial infections of the sinuses which must be recognized and adequately dealt with. One word will explain the background of practically all of these complications and that word is obstruction. Edema of the mucosa in the vicinity of the ostia associated with tenacious exudate in the involved sinus results in blockading the sinus, thereby preventing the escape of the inflammatory products and subjects the patient to dangers in varying degrees of disability which may include the loss of life itself.

Specifically, three instances of such complications present themselves most prominently, 1. A blocked maxillary sinus. This is characterized by a dead aching pain over the face corresponding to the involved side, soreness and aching of the upper teeth, of that side, neuralgic pain over the entire side of the head, general malaise, fever and

great general discomfort. When unable to obtain drainage by shrinking the mucosa of the middle meatus, a trephine operation under the inferior turbinate bone should be performed at an early date. This will relieve the pain immediately and provide adequate drainage for the antrum through its period of convalescence. 2. Periorbital abscess resulting from rupture of an acutely infected ethmoid cell through the lamina papyracea. In the event of this complication, the pus should be evacuated and drainage established by way of an external incision internal to the internal canthus of the eye, and an opening effected into the involved ethmoid cell or cells. 3. Blockage of the frontal sinus. Whenever the frontal sinus duct becomes occluded, the patient at once develops symptoms which render him more or less unable to perform his duties in a normal way and very often brings about complete disability. When such a situation arises, it is good practice to consider the advisability of trephining an opening into the frontal sinus through a short external incision and the installation of a rubber tube for drainage. If done at the proper time, the tube may be removed after two to four days and the sinus returns to a healthy condition. My practice is to shrink the mucosa in the middle meatus and apply ice caps over the involved frontal sinus (one hour on and one hour off.) If drainage is established, even to a small degree, I persist in this manner. If no drainage is established and the pain persists, then I unhesitatingly perform a trephine operation. The relief of pressure following the trephining of the frontal sinus prevents the development of pressure necrosis of the edematous mucosa of the sinus and assures the reestablishment of the normal condition of the tissue, provided the operation is carried out at the proper time.

Nasal allergy, because of its wide incidence, comes into the picture of sinusitis on the grounds that, clinically, there are a number of similarities. The concept of sinusitis was established in the public mind long before nasal allergy was recognized, even by medical knowledge.

The first problem that confronts the rhinologist with a patient having nasal allergy, alone, is to convince that patient that he does not have sinus disease. Having accomplished that item it then becomes his

problem to acquaint the patient with the name and nature of the disease with which he is handicapped.

To be entirely realistic, the doctor must first take such steps as are necessary to assure himself of the correct diagnosis. No doubt, there are individual variations in this procedure. In my practice, three procedures are emphasized:

1. A rigid history
2. Inspection of the nasal mucosa
3. Gross and citological examination of the washings from the maxillary sinuses.

The most effective method to convince a patient that he does not have sinus disease is to show him an X-ray picture of his sinuses contrasted side by side with the cloudy pictures of a patient having sinusitis. He believes a picture and accepts that which you tell him regarding its significance with complete credulity although he is quite skeptical of what you say in your attempts to convince him otherwise. The most effective method to convince the patient that he does have a nasal allergy is by skin testing, allowing him to observe the individual reactions of the substances with which these tests are made.

I, therefore, regard as essential in making an examination for nasal allergy these five procedures:

1. A rigid history
2. Examination of the nasal mucosa
3. Examination of the antral washings
4. X-ray pictures of the sinuses
5. Skin testing

I will not attempt in this limited time to discuss at length the various phases of treatment for nasal allergy. I will, however, emphasize one fundamental point in its management namely, the mental adjustment necessary on the part of the patient to the conditions confronting him as an allergy sufferer. This adjustment can be accomplished only by the clinician who, fortified with a broad knowledge of the subject of clinical allergy, will take adequate time to map out for the patient the whole scheme for his activities and for his treatment. It is only when the patient understands his condition and the reasons for doing all the things he is asked to do, will he give the cooperation which, as every physician who deals with allergic cases knows, is necessary for success in their management.

CHRONIC MAXILLARY SINUSITIS*

THEODORE G. WAILS, M.D.

OKLAHOMA CITY

When one considers that with every upper respiratory infection there is an accompanying sinusitis, and that all eight of the sinuses must clear up for the person to get well, i.e., that there are eight times as many sinus infections as there are "colds", it is not remarkable that there are so many sinus infections.

With our heads down, i.e., before we raised up on our hind feet all the natural otitis were located downward so that gravity helped drain the sinuses. The mucous membrane of the sinus is a ciliated columnar type with the cilia all waving toward the natural ostium, and this motion with the help of gravity kept the sinuses from retaining any infection. But in our upright position the cilia have to work uphill against gravity to clear the cavity of infection. If then there is any unusual swelling or any obstruction about the natural ostium there is sure to be retained infection after a "cold".

When Dr. Mithofer, of Cincinnati, was in Oklahoma City about 20 years ago and gave his lecture on sinus disease, I felt that he was paying too much attention to the maxillary antra as being the main offender in chronic sinusitis. However, when a member of the Mayo Clinic, about 10 years ago, gave at the American Ear, Nose and Throat Society, statistics that corresponded with Mithofer's I began to treat this condition more seriously. I am not in accord with Dr. Mithofer in thinking that the maxillary is the main cause of all the other sinus infections, and if cured will result in clearing up infected ethmoids, frontals and sphenoids. The ostium, however, of the maxillary antrum is placed in the worse possible place to secure drainage, being located in our upright position, at the top of the sinus. All the other ostia are located either on the floor

or sides of the sinuses thus getting some help from gravity in clearing themselves up.

On account of the poor location of the ostium of the antrum it has been my experience that in the non-allergic person about 70 percent of the chronic sinus infection I see comes from the maxillary antrum. In the allergic person the ethmoids seem to give equally as much trouble because of their tendency to polypoid degeneration.

We also are finding quite often that many diseases such as corneal ulcers, scleritis, retinochoroiditis and arthritis clear up promptly when an infected maxillary is ventilated or drained.

It has been quite a wonder to me how so many good physicians can spot an infection in a pair of tonsils the instant they see them yet pass up a dark maxillary antrum where the mucous membrane is so thick no light can come through it.

The mucous membrane in the mouth or pharynx or nose returns to its normal thinness when the acute infection has subsided so why shouldn't that in the sinuses, unless they continue to be infected. These antra fill up with muco-purulent material and will occasionally empty themselves out during the early morning, this being manifest by a great deal of clearing of the throat, coughing and expectoration. If, after this, the physician irrigates such an antrum he is likely to find only a few shreds of mucous in the washings and think the antrum is clear, whereas if he had washed it an hour earlier he would have found it full of muco-purulent material.

If one antrum is definitely darker than the other on transillumination and the patient has typical morning headaches clearing up through the day, a postnasal muco-purulent discharge, a lot of morning coughing, pain located around the same ear or neck, a cold that hangs on more than a week, an accompanying bronchitis and a history of

*Presented before the section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1949

too many colds each year, then this is a chronic maxillary sinusitis, even if when irrigated one finds only mucous shreds in the washings. The x-ray cannot be relied entirely upon for diagnosis because it will only show cloudiness when the periosteum has become thickened, and this is usually very late in the disease. We see many cases where a dram or more of pus is washed from a sinus reported negative by x-ray, but dark on transillumination. If these antra are injected with lipiodol and then x-rayed, the thickened mucous membrane is more likely to be demonstrated.

About 10 years ago, we started a routine irrigation of all dark maxillary antra where the patient had corroborating symptoms of sinusitis, i.e., headaches, post-nasal discharge, chronic pharyngitis and laryngitis, pain over the antrum or around the same ear, or a painful spot in the neck with no tonsil to account for it. Heretofore, we had considered that an antrum dark by transillumination did not mean much, unless we could see pus coming from beneath the middle turbinate. A chronic sinus infection usually starts by being slow to clear up, taking two or three weeks instead of the seven days of the average cold. Then taking longer with each cold until the sinus finally does not clear up between colds. The cilia gradually disappear, the mucous membrane becomes flat and pavement like, then there is a chronic sinusitis which the person will keep the rest of his life unless he does something about it.

If this sinus is apparently cured by frequent irrigations, followed by penicillin instillations, it will only stay dormant until the next upper respiratory infection because it has no adequate defense mechanism. On the other hand if such a sinus has permanent drainage established at the lowest point possible, it will become infected with each succeeding cold as do all the other sinuses connected with the Snyderian membrane, but the infection will drain out by gravity and it will clear up eventually though somewhat slower than the normal sinuses. Large doses of penicillin will help cure the acute exacerbation of a chronic sinusitis, but will not affect the pathology that produces the chronicity. Therefore, you can not cure a chronic maxillary sinusitis with penicillin, alone.

If the retained infection is fairly new, the acute symptoms are well known, consisting mostly of headache, malaise, a sticky muco-

purulent nasal discharge and an accompanying bronchitis. Free ventilation of the nose with supportive treatment for the acute upper respiratory infection, such as alkalization, rest, water and a sulfa drug or penicillin usually effects a cure.

If, however, the sinus has been slow about clearing in the past; i.e., if their "colds" hang on, then usually it will take more than ventilation. Some of these will clear on acute sinus treatment plus the hygroscopic effect produced by argyrol packs. If the retained infection, however, is as much as six months old it will seldom get well on this treatment. I know many physicians think they get these well by treating them when actually the patient has only gotten a little better i.e. rid of their headaches, and if they have actually gotten well there is no assurance that the process will not need to be repeated following their next "cold". If their own defense mechanism has been inadequate to clear them in the past it will probably be inadequate in the future.

Suppose the conservative ventilation, aeration, argyrol packs, suction and supportive drugs have been used unsuccessfully, then the antrum should be irrigated, preferably through the inferior meatus, but occasionally through the natural ostium and left full of penicillin solution.

Most of these cases will begin to improve by the second day. In headaches of obscure origin, a dark sinus should be washed a time or two as a diagnostic procedure. In many unexplained fevers, especially in children, the sinuses have not cleared up following a cold. One should be suspicious of a cough that lasts for weeks following an upper respiratory infection, particularly if the person feels like a "cold" is hanging on, or if there is a chronic bronchitis present, and especially if he dates his symptoms as having started with a "cold".

The sinuses should not, however, be washed indefinitely because if they do not clear up quickly and easily, say in three or four treatments then they will not withstand the next cold and the process would need to be repeated following each infection. If conversely they do clear up with only a small amount of help, then that sinus might get well of its own accord at the next infection.

So suppose the antrum is irrigated three or four times and the person gets better but not cured, then a permanent naso-antral opening should be made; i.e. an antral win-

dow. This should be made possible in order to get dependent drainage. If there is a bad deflection of the septum toward the affected side and there usually is, then enough of the lower turbinate should be removed to get good access to the nasal wall of the antrum or better still a submucous resection of the septum. These windows will work well if they stay open; we find we need to re-open one out of about every 50. They will not only clear up the present infection, but will clear the sinus at each future cold, while irrigations and more conservative treatments are only good until the next cold.

Our statistics show that during the past six years we have done about 1000 antral windows and gotten cures in about 95 per cent of the cases.

We see these cases a year or two later usually with their next cold, but an easy irrigation or two, through a large window plus a large dose or two of penicillin clears them promptly.

There are a few cases, however, that have had the infection 15 or 20 years where the mucous membrane is so degenerated that it is impossible for it to return to normal, that do not get well on permanent drainage although they will get better. These are the five per cent that need the radical Caldwell-Luc operation. These cases should have antral windows made, and be left alone for at least six months to see if they can return to normal. If not, then the radical operation is indicated.

In this case, as you know, the diseased mucous membrane is removed from the inside of the sinus and good mucous membrane turned into the sinus through the lower meatus. The antrum then relines itself with this good nasal mucous membrane. The diseased mucous membrane in this type of case is usually very thick and polypoid or cystic and it is usually easy to see why it could not return to normal with the ventilation and drainage afforded by a permanent window. Sinus infection in allergic cases present a special problem, since one will need to control the allergy before and after determining what the sinus will need to cure it.

Especially is this true in children. Their chief symptoms are usually a cough, or an unexplained fever, or inability to breathe freely even after removal of the tonsils and adenoids, allergic symptoms and dark antra by transillumination or x-ray and a wet dirty nose.

Usually in children treatment has been Proetz displacement using instead of one-fourth per cent ephedrine, however, one-fourth per cent of aqueous neo-synephrin as it produces less after-irritation. I do not believe these shrinking drugs should ever be used more than two times daily as a more frequent use will produce so much after swelling that it defeats its purpose; weak aqueous solutions left in a long time, rather than strong oily solutions should be used. On account of the danger of destroying teeth buds we do not do as many windows in children, although Dr. Shea, of Memphis, recommends it almost routinely. If, however, a window is indicated by heavy purulent drainage, then the window should be made far back so as to miss teeth buds.

In adults the rule is to take off a piece of the anterior end of the lower turbinate, then break the turbinate out toward the septum or even fold it upward into the middle meatus. As large an opening as possible is made between its attachment and the floor of the nose, the turbinate is then replaced and packing put into the window and between the window and the turbinate for a day or two to prevent adhesions.

These usually stay open when healed and leave permanent drainage at the lower part of the sinus. These sinuses usually do not get into much trouble, but are easy to handle if they do flare up at the next cold.

Do not have a defeatist attitude toward the sinusitis for barring new growths, I believe all of these chronic infected maxillary antra can be cured, by one means or another, the only question being what is the most conservative treatment that will make the sinus able to take care of itself at the next cold. These accompanied by nasal allergy must also have management of that condition, as well as treatment of the infection.

MALIGNANT MELANOMA

SAMUEL BINKLEY, M.D., F.A.C.S.*

If clinicians and cancer research workers are able to throw light on the mechanism by which a simple pigmented mole becomes accelerated into a malignant growth capable of wide-spread metastasis and death, then some of the less accessible growths, such as mammary cancer, may be more readily understood.

Malignant melanoma has the darkest reputation of all the neoplasms and has been called "black cancer" by the laity and profession — a rapid and almost hopeless disease once it has metastasized.

The hopelessness of malignant melanoma is not justifiable if the disease is viewed in the proper perspective. The tendency to group the disease simply into a phase of widespread metastasis has resulted in a pessimistic attitude on the part of the profession. This pessimism has led to a wave of very mutilating and radical surgical procedures which, though justifiable in occasional instances, should not blind us to a better fundamental understanding of this process.

The end results in malignant melanoma should be viewed in terms of what one may expect from the treatment of the localized disease and before there is evidence of metastasis. The published survival rates and end results in malignant melanoma exceed those of cancer of the stomach or lung, which command so much attention in our teaching clinics.

If only a fraction of the energy that is being dissipated in the treatment of advanced cancer could be directed toward early recognition and prevention of the disease, fewer large operations would be done and more patients would be alive five years later.

My text, therefore, is this — treat moles at an early stage, wherever you find them, by wide, deep surgical excision, and the death rate from melanoma will drop. An analysis of reported results in proved cases indicates that the patients who have done

best are those in which a suspicious mole was excised widely before symptoms of bleeding or ulceration developed. A small operation before the mole becomes active is of more value than a radical operation after the disease has exhibited rapid growth or regional metastasis. A careful inspection of the skin of the entire body is essential if we are to discover the early melanomas, and the best way to do this is to have your patients strip for examination; a detail frequently neglected in this era of high speed and heavy schedules.

Of 265 cases reported by Taylor and Nathanson¹, 25 per cent survived five years free of disease, but only seven patients survived who had node metastasis. The Memorial Hospital group² has reported 17.7 per cent five year salvage for localized melanomas and 15.6 per cent five year salvage of patients with melanoma metastatic to regional lymph nodes. This work suggests that the removal of the primary disease together with the regional nodes in one block dissection may increase the survival rates.

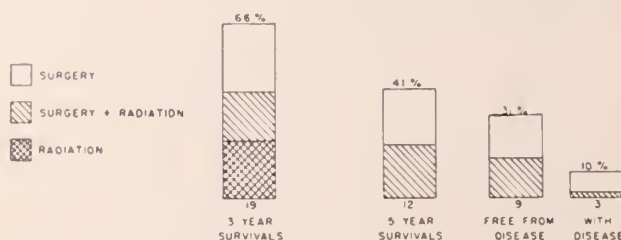
At the Los Angeles Tumor Institute, in a group of 53 private patients, (Fig. I), 66 per cent were living at three years, and 49 per cent were free of disease. In a smaller group eligible for five year study, (Fig. II), 41 per cent survived five years, and 31 per cent were free of disease.

A five year survival rate of from 15 to 25 per cent free of disease compares favorably with common forms of cancer regarded as less dangerous. It is unfair to deprive these patients of the benefit of adequate surgical treatment, and they should not be treated by caustics, inadequate electro-desiccation, or a watch and wait attitude.

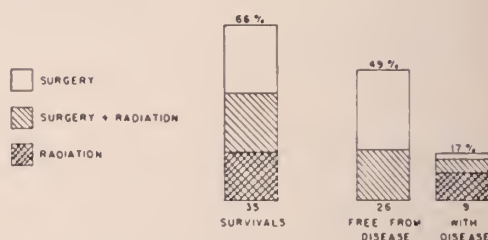
In this discussion when we use the term "melanoma" we mean the malignant variety of mole, since by present usage the term "melanoma" is restricted to the malignant group. The benign mole by present usage is referred to as the "pigmented nevus."

*Guest Lecturer — Program of Cancer Teaching, University of Oklahoma School of Medicine, December 14, 1949.

MELANOMA - 29 PATIENTS
THREE AND FIVE YEAR SURVIVALS
1935 - 1944



MELANOMA - 53 PATIENTS
THREE YEAR SURVIVALS
1935 - 1946



ETIOLOGY

Melanomas generally arise in a pre-existing pigmented nevus from cells which produce melanin, and the first suspicion of danger is a change in color, size or shape, manifest by increased black pigmentation, elevated growth or lateral spread, ulceration, pain or bleeding. They may arise spontaneously in apparently normal skin and in certain instances may show no pigment. These non-pigmented melanomas, in my own experience, tend to occur in and about the scalp and the skin of the extremities. They occur in people with fair or light complexioned skin, who have many freckles and sandy hair. The metastatic lesions, however, generally show characteristic dark melanin deposits.

INCIDENCE

Malignant melanomas occur in equal proportion in the sexes at all age groups. They may occur from infancy to old age, but the peak is between 35 and 70 years. The incidence rises sharply after puberty and the most fulminating form of the disease occurs in the age group from puberty to 30 years.

SITE

The most common site is on the skin of the extremities, the head, neck, and trunk region, but malignant melanomas may occur in any site or organ of the body.

PREPUBERTAL AGE GROUP

Moles which are discovered during infancy and early childhood period deserve a special word, since a number of writers have emphasized that many of these lesions are identical in their histology to malignant melanomas. The clinical course, however, is benign and if removed they do not metastasize. It has been suggested that these prepubertal moles, which appear histologically malignant, be given special consideration as a group, due to the good prognosis. This tumor probably has some inter-relationship to the gonads, the pituitary gland and the

suprarenal glands.

Certainly everyone agrees that a microscopic diagnosis of melanoma or malignant change in infancy and childhood does not call for an extensive mutilating radical procedure, such as amputation or node dissection, if the child has not reached puberty.

The black or dark moles in children

(1) should be removed by complete and adequate surgical excision; and

(2) it is a mistake to delay removal until a change has taken place.

POSTPUBERTAL AGE GROUP

The five year results are only half as good in the group puberty to 25 years as in the older age group. Therefore, if radical mutilating procedures are to be adopted, we might confine radical surgery to this group, though there is evidence to suggest that the improvement in end results may come from a better understanding of the physiologic and chemical "balance" of the patient at the time the surgical procedure is done.⁴ Among the theoretical conditions which alter "balance" may be mentioned the proteolytic enzymatic system and the different ways in which the body responds to hormones, vitamins and other chemicals associated with growth and metabolism.

A critical study of the melanoma problem, and particularly the age group in which all neoplastic disease flourishes in an unchecked state, may open the door to a method of altering existing conditions of the patient toward a more favorable setting for control of the disease.

Since we have suggested a hormonal relationship, it should be mentioned that in isolated instances castration has been tried by others without alteration of the disease. No serious effort, however, has been tried to deactivate the gonads at a favorable stage of the disease. X-ray therapy to the pituitary gland has been used in hopeless cases. Insofar as pregnancy and malignant melanoma are concerned, we have had one patient on

whom we performed an axillary node dissection following removal of a primary melanoma of the arm. A year after this she skipped her follow-up visit and when she came in five months pregnant she said she wanted another child and was afraid we would advise an interruption. She was permitted to complete her pregnancy. There was no change in the status of the mother during or after pregnancy. The child is now a husky lad of three years. The mother is free of active disease.

Parkes-Weber³ described a case in which a pregnant mother died of melanoma, but a living child was born who died shortly afterwards from metastasis to the liver.

Daland⁵ reported a female, age 23 years, who had a melanoma followed by two pregnancies. The first pregnancy had no effect on the disease and, though a metastasis appeared during her second pregnancy, the pregnancy was not regarded as a factor.

SPREAD

1. Melanoma cells may spread via the blood stream to the liver, lungs and bones;

2. by deep lymphatics with involvement of nodes;

3. by superficial lymphatics with nodules in the skin, fat and fascia.

A careful study of the physiologic state of "balance" previously mentioned might throw some light on the mechanism of spread. It is conceivable that under certain circumstances cancer cells may circulate in the blood and lymph stream, yet be rejected by the receptor and die. In another individual, similar metastatic cells might flourish and grow. If anti substances are present in some and lacking in others, we should be able to study this phenomenon in humans and pursue these theoretic concepts.⁴

We know that under certain circumstances, in fighting bacterial invasion, the lymphatic system functions and picks up the invaders and creates road blocks at the lymph nodes. In some people the lymphatic system does not function so well and there is a rapid invasion of the blood stream.

DIFFERENTIAL DIAGNOSIS

1. The simple, benign, pigmented nevi are flat or slightly elevated, light brown in color, 20 or 30 in number, are scattered over the body, and may contain hairs.

2. Pigmented basal cell carcinomas are generally found about the inner canthus of the eyes or on the nose and face. They have elevated, glistening borders with a punched-out crater and scattered brown to black pig-

ment.

3. Seborrheic keratoses are soft, raised, occasionally sessile, or flat; they occur about the shoulders, neck and face, and have a light brown color, often waxy, and contain dirt and exogenous pigment.

4. The true malignant melanoma as a rule is jet black, smooth and glistening, but is occasionally dark brown with black stippling.

BIOPSY

Do not cut into a mole in order to obtain tissue for microscopic examination. The mole should be widely excised without trauma to the pigmented portion.

TREATMENT

The treatment, as in all malignant lesions, should be altered to suit the clinical stage of the disease.

Stage I. Simple suspicious pigmented mole (undiagnosed).

(a) Treat by wide surgical excision, including the underlying fat and fascia, removing at least one centimeter of normal skin on all sides, preferably two to three centimeters.

(b) If histology is malignant, treat as Stage II according to age group.

Stage II. Localized malignant melanoma already proved by histology.

(a) Treat by wide and deep surgical excision of the recurrence or defect, removing from six to eight centimeters of healthy tissue on all sides, and plastic closure or skin graft, depending upon the site of the primary.

(b) Node dissection in continuity or in three weeks, depending upon the primary site.

Stage III. If the primary growth is ulcerated, recurrent, or with satellites and definite regional lymph adenopathy, treat by:

(a) Radical amputation or disarticulation; or

(b) Wide local resection and skin graft with node dissection depending upon the patient's age and general condition.

(c) Radiation therapy may be used in combination.

Stage IV. Extensive bilateral local disease — no liver enlargement.

(a) Treat by extensive local resection in multiple stages, with skin grafting and node dissection combined with radiation therapy.

Stage V. Localized disease plus liver involvement.

(a) Treat by palliative local resection or radiation therapy, preferably teloradium therapy or heavily filtered roentgen rays.

METASTASIS

Delayed metastasis may occur anywhere from five to 20 years, and if we can discover the linkage as to why these late metastases occur, or what change in the receptive organ or site permits cell growth after a long period of control, then we may find the answer to the control of all neoplasms.

Conheim said this occurred "when physiologic metabolism of the tissues is altered by age, atrophy and inflammation". This is perhaps an over-simplification. The chemistry of the cancer process is very complex and poorly understood. A look at the modern inter-relationships of alphasitosterol (Vitamin E) or the utilization of any vitamin in health and disease is so complex as to require an expert chemist for interpretation. The same may be said of steroid chemistry and the mechanism of acceptance or rejection of various hormones.

Recurrent cancer occurs the same as symptoms of any other disease; there is a collapse of the complex defensive mechanism. Treatment of recurrent cancer by surgery or by radiation frequently fails just as the administration of Vitamin A may fail in Vitamin A deficiency. Indeed, it has been pointed out by Hickman⁶ (a chemist) that an over-administration of Vitamin A today may use up tomorrow's quota of fixative, and precipitate an enhanced deficiency. Under these circumstances, the giving of too much of a vitamin for too long will induce the deficiency syndrome of that vitamin. We know the value of so-called balance therapy in many diseases, but on the other hand we know little, if anything, about the mechanism by which chemicals antagonistic to cancer cells are conveyed, accepted, excreted and destroyed, or how these and other unknown chemicals operate in combina-

tion with surgery and radiation.

The state of our ignorance, for example, as to how cholesterol is fixed and utilized in the body and what its specific role may be with regard to transporting by chemical linkage known hormones and chemical compounds to various receptor organs — gives one a mere idea of the future role of chemistry and emphasizes the need for added research. If we are to make progress in the treatment of melanoma, it must come from early diagnosis plus an improvement in our knowledge of the balance of treatment methods. A more complete understanding of this jigsaw puzzle — the human body — is essential, and who is to say when or where the final picture will be completed?

SUMMARY

A review of five year end results in malignant melanoma (from large charity clinics) reveals a survival rate of from 15 to 25 per cent free of disease.

In a smaller group of private patients from the Los Angeles Tumor Institute, 31 per cent were free of disease at five years.

CONCLUSIONS

The end results in malignant melanoma should be viewed in terms of what one may expect from the treatment of the localized disease. The hopelessness of malignant melanoma is not justifiable if the disease is viewed in the proper perspective.

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TWENTY-FIVE YEARS AGO

(From Our Early Files of Editorial Notes—Personal and General)

DR. I. D. WALKER, Blackwell, returned recently after an operation for appendicitis, and is regaining his health.

DR. E. S. KILPATRICK, Elk City, returned from Kansas City where he had been attending some lectures on electro-therapies.

DR. JOHN A. MARTIN, Cushing, will represent Payne County Society as delegate to the State meeting at Tulsa.

THE STATE BOARD OF MEDICAL EXAMINERS has been reduced in number from nine members to seven, as a result of the signing by Governor Trapp of the bill authorizing the reduction. The new Board, which will hold office until 1929, now consists of Dr. Wm. P. Fite, Muskogee, Dr. Harper Wright, Grandfield, Dr. Harry C. Weber, Bartlesville, Dr. William T. Ray, Gould, Dr. D. W. Miller, Blackwell, Dr. L. E. Emanuel, Chickasha and Dr. J. M. Byrum, Shawnee, who was reappointed Secretary.

OKLAHOMA STATE MEDICAL ASSOCIATION thirty-third annual meeting was scheduled for May 12, 13, 14, 1925 in Tulsa.

MEDICAL ASPECTS OF SPEECH AND HEARING DISORDERS*

L. CHESTER MCHENRY, M.D.

OKLAHOMA CITY, OKLAHOMA

Speech is a wonderful thing. With it we can make friends and influence people. We can also get into trouble and sometimes can by the same means talk ourselves out of trouble.

Truly we are fearfully and wonderfully made. Let us consider the extremely complicated mechanism through which normal articulated intelligible speech is produced.

It starts with an idea or train of ideas in an intellectual center of the brain. Through nerve impulses to other brain centers these ideas are arranged into a pattern of words. More nerve impulses travel to the cortical motor areas governing the muscles of the larynx, the tongue, the palate and the lips and face. These latter organs may be called the molds of speech. To have something to mold, the muscles of respiration must furnish a moving column of air which the vibration of the vocal cords causes to vibrate, forming a sound which is finally made or articulated into words. Thus the normally automatic mechanism of breathing must be coordinated and at least partially dominated by the mechanism of speech. To form the vocal sound it is necessary for the vocal cords to draw tense, something like a violin string, to approximate so that they lie one against the other, and to vibrate so as to set the column of air moving between them into vibration. This fundamental sound is then finally formed into words by the molds of speech in the mouth and throat. Is it any wonder that there are numerous sorts of speech disorders when we realize that a change from normal function anywhere in this complicated chain of mental, nervous and muscular activities may produce an abnormality of speech.

For example, the idiot is incapable of forming a mental conception of speech although all the remainder of the speech mechanism may be intact. Certain aphasics may see a familiar object and know all about it but because of trouble in a certain word center in the brain he is totally unable to bring forth the particular word. Stammerers may know exactly what they wish to say and may even be able to write out the words quite fluently but be unable to say them because of a disorder somewhere in the nerve-cell habit between cortical brain centers and the muscles which form speech. Definite paralyzes of peripheral nerves which control the muscles of the larynx or of the structures about the mouth cause speech difficulties or even aphonia. A patient who has had his larynx entirely removed to cure a cancer cannot speak at all until he has learned to employ an entirely new mechanism to replace that which has been lost.

Speech is normally learned by imitation of intelligible sounds which reach the brain through hearing. Individuals who have never heard speech never learn to speak in a normal fashion, although they may learn to make themselves understood.

Now what may be done to aid people who are handicapped by speech disorders of various sorts?

As you all know and as has been so very well demonstrated during the past few days a great deal can be done to help them. You have heard of the work of those trained in speech physiology and in the correction of abnormalities. You have heard of the work being done with victims of cerebral palsy. You have heard of the retraining in speech of the cleft palate cases. You have seen demonstrated wonderful work being done with that group of children who cannot hear.

*Presented before the Speech and Hearing Conference, May 27, 1949, University of Oklahoma.

You have heard about the help that is being given those who have speech difficulties because of psychological or psychosomatic difficulties. The latest addition to the functions of the Clinic in Oklahoma City is a class for those individuals who have lost their larynxes entirely and must learn an entirely new method of forming words.

Most speech disorders, unless due to mental deficiency or to incurable physical lesions are remediable to a very high degree.

What is the function of the physician in this field of speech difficulties? Extremely few physicians are trained in speech correction. With the exception of the psychiatrist, the work of the physician lies in the field of diagnosis and in the treatment of physical abnormalities that interfere with the clear phonation and proper articulation of words.

Cleft-palate and hare-lip are quite obvious deformities which are quickly discovered and which are corrected surgically at the proper time. Cases of cerebral palsy are readily recognized if the physician is given the opportunity to observe them. Infants who are physically well but mentally deficient sometimes require a period of observation before a complete diagnosis can be made.

The first duty of a physician who is presented with a child who does not talk is to determine whether or not there is some significant abnormality of the peripheral mechanism of speech. It is necessary to examine the structure and movements of the face, lips, tongue, palate and the larynx. It is necessary to know whether the nasopharynx and the nose are functioning properly. If the child cries lustily and clearly we may assume that the vocal cords are not at fault. If he does not so demonstrate his vocal ability direct laryngoscopy may be necessary to determine the condition of the larynx. Many normal youngsters do not try to talk until they are nearly two years of age.

If the larynx and the structures about the mouth are apparently normal it is next necessary to determine whether the child can hear ordinary speech. If he can hear only very loud sounds he will still not learn to talk because he does not hear the speech of those about him. Everyone who has thought about the problem knows that we learn to talk by imitating the speech that we hear. This faculty of imitation is carried even into the individual peculiarities of id-

iom and dialect. The infant child of a family on Beacon Hill in Bahston does not speak with soft southern accents and the child raised in Gawgia does not talk like and may not even understand a down east Yankee. A child who does not hear speech at all can be taught speech but only by very highly trained, patient teachers and by a very slow process. A child who hears speech very poorly usually develops speech relatively as poor as his hearing.

In older patients it is sometimes quite difficult to determine whether a speech difficulty is due to physical abnormality in the peripheral organs of speech or whether it is due to functional nervous disturbance. Sometimes both are encountered and the patient can be relieved only through the combined efforts of the physician and the speech correctionist.

A child with a marked tongue-tie has difficulty in articulating certain sounds clearly. This is readily corrected by a minor surgical operation.

A child whose nasopharynx is entirely filled with adenois cannot speak clearly because of interference with proper functions of the palate and of the resonating chambers connected with the nasal passages. Adenoidectomy, of course, corrects this situation.

The most common speech difficulty which confronts the physician is hoarseness. It varies in degree from a mild huskiness to complete aphonia.

Perhaps the majority of the patients arise through inflammatory changes in the larynx. If the inflammation is an acute condition brought on by an upper respiratory infection or by yelling too lustily at a football game, simple rest of the voice until the inflammation disappears is usually all that is necessary to restore function. If the patient insists on using his voice while the larynx is inflamed the element of strain is added and the situation will be prolonged. Chronic infection of the sinuses or nasopharynx sometimes causes chronic inflammation in the larynx. A more frequent cause of chronic laryngitis, however, is chronic laryngeal strain.

Chronic vocal strain is caused either by talking too much or too forcefully over a period of time or by using a faulty method of voice production over a period of time. Such strain results in chronic inflammatory changes in the vocal cords. The cords become thickened and roughened. Efforts to force

them to function over the handicap of the thickening and swelling cause further changes and make a bad matter worse. Sometimes actual tumors form on the vocal cords and have to be surgically removed. In many instances of chronic laryngitis the condition results in a permanently hoarse voice. Many singers and public speakers end their careers on the stage and platform because of chronic laryngitis. When such changes in a larynx are discovered and correctly diagnosed, a normal voice can often be regained if the patient can be persuaded to stop straining his larynx and can be trained to use methods of voice production which do not strain his larynx. In these instances the services of a trained speech correctionist are invaluable. In almost all instances where it has been necessary to remove an inflammatory tumor from a vocal cord, special training in voice production is necessary before a normal voice is regained.

Paralyses of motor nerves to the muscles of the larynx, palate, tongue and face cause speech deficiencies which are sometimes correctible and sometimes not.

Tumors of the vocal cords cause hoarseness as a very early symptom. Tumors elsewhere in the larynx or in the pharynx may not cause voice changes until they are quite far advanced. In children these tumors of the vocal cords are usually benign and their removal results in restoration of the voice as long as no normal tissue need be removed. Adults also have benign tumors which may be safely removed and leave normal larynges. Many adults need speech correction after removal of benign tumors because of the faulty habits of voice production which have developed during the presence of the tumor in the larynx.

Malignant tumors, or cancers, present a much more difficult problem. To cure these by surgery every vestige of the tumor itself and all tumor cells which may have spread into surrounding tissues must be removed. Sometimes the lymphatic glands are removed from the entire neck as well as the larynx itself, and the muscles attached to it. When, however, a small cancer of the vocal cord itself is discovered and a microscopic diagnosis made early, over 90 per cent of them may be cured by removal of the tumor with a surrounding zone of normal tissue from within the larynx. If the entire vocal cord, or a large portion of it, is removed, the patient's voice will, of course, not return to normal. However, so long as enough of the larynx is left that the patient is able

to breathe through his mouth, he will have a usable voice. The voice may be rough, inflexible, and of poor tonal quality, but he will be able to talk to his fellow man, and is usually able to use the telephone. When it is necessary to remove the entire larynx, the patient no longer breathes through his mouth and the natural voice is, of course, lost. However, most of these patients can be taught to develop useful voices by learning to swallow air and regurgitate it through the mouth while forming words with the molds of speech. Cancers of the larynx are also at times curable by X-ray treatment. The decision as to which method of treatment offers the best opportunity of cure for any individual patient is a most difficult one.

Let us now consider the physician's role in the problems of *hearing* disorders.

A prominent medical writer has stated that "No one knows the extent of the world of silence". Many statistics have been assembled as to how many individuals are born without the faculty of hearing. Many surveys have been made to determine how many school children are acoustically handicapped. Many additional figures have been gathered as to the need for additional workers in this field. You have heard the results of some of these surveys this past few days. If you have not been inspired by the progress of the work in this field and by the patience and tireless industry of the workers who have appeared before you, the implications as to the extent of the world of silence are indeed lost.

The mechanism of hearing is in some respects more simple than the mechanism of speech because it is a passive rather than an active function. There is a mechanical apparatus for the collection of sound waves and for conduction of these waves of energy to the terminal filaments of the hearing nerve. Then there is an organ to transform the physical sound waves into nerve impulses which are in turn passed through nerve filaments to the brain where the mental phenomenon of sound perception takes place.

The physician divides hearing losses or deafness into two types, depending upon whether the physical apparatus for conducting sound waves to the hearing nerves is at fault or whether some of the nervous elements are at fault. The first type is known commonly as conduction or catarrhal deafness and the second as nerve deafness, or

sometimes as perception deafness. Conductive hearing loss never produces total deafness, a loss of about 60 decibels being the greatest that is caused by a purely conduction lesion. Greater losses and total deafness always indicate nerve damage.

Congenital deafness may be either conductive or perceptive, although those which are conductive are comparatively minor in degree and may at times be surgically correctible. The physician as such has almost nothing to offer the congenitally deaf, although he is frequently the first to be consulted as to why the infant has not learned to talk at an approximate normal time. You have been shown very clearly by this conference why a physician who is well informed no longer tells the parent of such a child that there is nothing to be done for the child. He can at least serve as a counselor in directing the parent and the child into the care of those who can help him.

Acquired deafness may be as severe as congenital deafness. Childhood is the most precarious period of life, so far as hearing is concerned. Deafness so severe as to prevent the acquisition of speech, or to cause loss of speech partly developed, may be caused by childhood infections. These infections sometimes cause deafness by actual infection and destruction of the inner ear, but more often by a toxic neuritis of the hearing nerve. Meningitis is the most frequent offender and measles and scarlet fever the next most important, with influenza as the fourth most frequent. Skull fractures cause some instances. Syphilis has been long suspected, but is found but rarely among deafened children. Medicine has much to offer in the prevention of profound deafness from these infections through recent developments in treatment and prevention. No longer is a mother advised to expose her infant to measles in order to get it over with. The result may be a deaf child. The modern physician can immunize or partially immunize a child to measles so that he either does not have the disease at all or has a very light attack. Meningitis is still a very serious disease, especially when influenzal in origin, but is responding to modern medicines very much better than a few years ago. Scarlet fever fortunately, is due to an infection which is susceptible to recently developed medicaments and no longer are its dreaded complications prevalent.

Infection of the middle ears, ordinary

middle ear abcess, and its complication mastoiditis, while it is the cause of hearing loss, is not an important factor so far as profound deafness is concerned. The hearing losses caused by middle ear disease are of great importance. Many children have done poorly in school and have been mistakenly thought to be mentally dull because they could not hear well. A very valuable work is being done in many public schools in discovering such children. Many of these youngsters have middle ear infections with every head cold. Some have chronically discharging ears. Many simply have poor hearing because of poorly ventilated middle ears from obstruction of the eustachian tubes.

Modern medicine has made great strides in the treatment and prevention of these conditions. Middle ear abscesses are usually aborted at their beginning nowadays. Acute mastoiditis has become a rarity, comparatively, in the doctors' practice. Properly done adenoidectomy has probably contributed more to the prevention and correction of minor degrees of hearing loss in children than any other one thing.

Tonsillectomy and adenoidectomy are the most frequently performed of all surgical operations. Many people apparently feel that all children should have their tonsils and adenoids removed as soon as they reach a certain age. This is not so. Age has nothing to do with the question as to whether or not a child needs his tonsils and adenoids removed. If the child has had repeated attacks of tonsillitis, the tonsils are obviously diseased and should be removed. Adenoids are of more importance than the tonsils so far as hearing is directly concerned, and they take part usually in the same infections that the tonsils do. If a child has otitis media with every cold; if examination shows that adenoids are preventing proper ventilation of his middle ears through the eustachian tubes; if he cannot breathe through his nose because his nasopharynx is full of adenoids, he needs to have his adenoids removed. His age is not a factor of importance. While the adenoids normally become smaller as the individual grows up, careful examination of the nasopharynx reveals similar situations in quite a number of adult patients with catarrhal hearing loss. It is true that adenoids sometimes regrow after removal. If these recurrent growth cause recurrent difficulty, repeated operative removal may be necessary. In many instances these recurrences are so situated that they may be better treated by X-ray therapy or by treat-

ment with small radium applicators manufactured for that purpose. Treatment of hearing losses by radium or by radon has been rather well popularized in recent years. The only usefulness of such radium treatment is to cause shrinkage of lymphoid tissue in the nasopharynx and in this manner enable the eustachian tubes to function properly. It has no other function in the treatment of deafness. It was used with considerable success during the recent war in the treatment and prevention of aero-otitis in aviators who suffered from obstruction of the eustachian tubes.

Some adults have conductive hearing losses due to adhesions and scar tissue in their middle ears as a result of repeated or severe acute middle infections in childhood. Such hearing losses are not in themselves progressive unless there are repeated acute infections or chronic infections.

Chronic progressive deafness in adult life is a most serious problem. It is most often caused by otosclerosis. This is a condition characterized by new bone formation in or about the bony capsule of the inner ear. Characteristically, it finally involves the footplate of the stapes and fixes it in the oval window so that it can no longer vibrate and transmit sound waves mechanically to the fluid endolymph of the inner ear. Thus a conductive type of hearing loss is caused. It usually begins in early adult life and is slowly progressive. Usually one ear is involved before the other. Its cause is unknown, although a tremendous amount of research has been done and is being carried out in an endeavor to find its cause. Heredity appears to be an important factor in its development. Sometimes in women the hearing gets definitely worse with each pregnancy, though this is not always true. There is no evidence that its appearance has any relation to previous middle ear infections, nor does its progress have any dependence upon the condition of the nose and throat. The hearing is worse, of course, if there is any superimposed inflammatory condition of the middle ear. Sooner or later some degree of nerve degeneration occurs and unfortunately some cases progress to profound deafness.

Only in recent years has there been any really effective treatment for otosclerosis. The fenestration operation developed by Lempert has been effective in restoring practicable hearing to many people. This

operation does not stop the otosclerotic process but provides a new opening into the inner ear, a fenestrum, by which sound waves may again reach the endolymph and the end organs of the hearing nerves. The fenestration operation can be effective only in those individuals with clinical otosclerosis who have no or very little degeneration of the hearing nerves. It cannot be done in the presence of infection nor in ears where there is extensive scarring or absence of the ear drum. It should be performed only by skilled otologic surgeons who have had special training in its technique. It is a major operation, very highly technical, and should not be done upon patients who are not in good general condition for major surgery. Finally, in the most skilled hands and with carefully selected favorable cases, good serviceable hearing is restored in only from 60 to 85 per cent of the patients operated. Nor can any operator guarantee that the restored high level of hearing will be indefinitely maintained. In spite of these limitations, there are thousands of people who now have good serviceable hearing for conversational voice because of the fenestration operation.

There is another great group of people who have hearing losses. It is caused by slow degeneration of the hearing nerves, is insidious in onset, and slowly progressive. It occurs usually in the aged and is commonly called senile nerve deafness. It has no specific cause and there is no effective treatment.

We have outlined briefly several categories of hearing loss and their medical aspects.

1. The congenitally deaf and those who acquire profound deafness in early life. For these medicine has no effective treatment, but has something to offer in the way of prevention.

2. Those hearing losses of lesser degree, but nevertheless severely handicapping, which are caused by infections and inflammations of the middle ear and most frequent in childhood. For these medicine has much to offer, both in prevention and in treatment. Under skilled medical care, most of these handicaps can be relieved.

3. The chronic progressive deafness of middle life. The only effective treatment so far developed is the fenestration operation. It offers hope and restores hearing to many.

4. The nerve deafness appearing characteristically in the aged. Medicine has no

treatment to offer but a well informed doctor can offer advice which will result in considerable help to these people.

We have, purposely, not as yet mentioned the electric hearing aid. Its development and improvement have paralleled the development of radio and electronics. It cannot restore hearing, but its use enables the hard of hearing to hear very much better. Many thousands of people who would have become social outcasts, auditory hermits and psychological misfits have been restored to and maintained in useful, happy pursuits by the efficiency of these instruments. The doc-

tor can now tell his patient, "No, I cannot help your hearing, but I can help you hear a great deal better".

As a physician, I cannot praise too highly the workers in the field of speech and hearing disorders outside the offices and clinics of practicing physicians. Many doctors are not aware of the tremendous work being done or of its value both to the handicapped individuals themselves, and to the community at large. I take great pride in helping to spread knowledge of this work among my fellow physicians.

THE DIAGNOSIS AND TREATMENT OF INTERVERTEBRAL DISC LESIONS IN THE LOW BACK*

J. ALBERT KEY

ST. LOUIS

Just as low back pain is one of the most frequent complaints of man, so are lesions of the intervertebral discs in this region one of the most common pathological conditions present in adult men and women. This is because these lesions are the most frequent cause of lowback pain and sciatica. We now believe that the conditions which we formerly diagnosed sacroiliac strain, lumbosacral strain, postural and traumatic lowback strains, facet syndrome, and lumbosacral arthritis or spondylitis are all lesions of the intervertebral discs in the lumbosacral region. Since these comprise over 90 per cent of the patients whose chief complaint is pain in the low back, it is evident that intervertebral disc lesions in this area are very frequent.

The difficulty is not to diagnose a disc lesion in a patient who is suffering from pain and disability in the low back with or without sciatica, but to diagnose anything else. The other conditions which cause pain and disability in this area are: Spondylolisthesis, fractures involving the lower lumbar vertebrae, neoplasms involving the bone in this area (either primary or metastatic tumors), disease of the vertebrae in this area (especially tuberculosis), ankylosing

arthritis of the spine (spondylose rhizomelique of Marie-Strumpel), and intraspinal tumors.

Any of the above may cause symptoms and physical signs which resemble those caused by intervertebral disc lesions. Fortunately, they are all relatively rare conditions and unless the patient is seen quite early in the disease careful x-ray examinations will usually reveal the lesion in the bone and lead to the correct diagnosis. An exception to this rule is an intraspinal tumor which may cause symptoms and yet not be revealed by the x-ray.

The lesions in the discs vary from a softening and degeneration of the disc with little or no bulging to a complete rupture of the annulus with extrusion of disc material into the spinal canal. The usual lesion found at operation is a disc which is softened and degenerated in its center and which bulges or protrudes posteriorly into the spinal canal and encroaches upon one or more of the spinal nerve roots in this area. It is known that some of the symptoms are caused by irritation of the nerve root or roots by the protruding disc. It is quite possible that some of the symptoms arise from the disc itself or from the adjacent periosteum or apophyseal joints.

It seems probable that the condition of a

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pathologic disc may vary from time to time and certainly the clinical pictures presented by patients with intervertebral disc lesions vary greatly among different patients and at different times in an individual patient. The clinical picture includes the history, physical findings, x-ray findings (including a myelogram), and the laboratory findings. The clinical course and the operative findings may be added.

In the history, the most frequent complaint is pain in the lowback. This may have followed a severe strain or fall or a slight catch in the back or strain as in bending over to tie a shoe or it may begin gradually without known cause. The pain varies greatly in severity and distribution. It may be a mild, dull ache which is present only after prolonged standing or it may be a severe lancinating pain which is aggravated by the slightest movement, and all gradations between these two extremes are encountered. In disc lesions of traumatic origin, the severity of the pain may or may not correspond to the severity of the injury. The intensity of the pain may vary greatly from week to week or even from day to day or it may be relatively constant.

It is especially to be noted that the patient may have had one or more similar episodes of lowback pain in the past and these may have lasted a variable period (from a few days to several weeks or more) and then quieted down with or without treatment, only to recur, perhaps with increased severity. It is usually aggravated by activity especially repeated bending or lifting or prolonged standing. In others, the pain is most troublesome while sitting or even at night while lying in bed. Many of these patients cannot sleep on the affected side. If the pain is severe, it usually is increased by coughing, sneezing or straining. It may or may not be relieved by rest in bed or by some protective posture which the patient has learned; such as flexion of the hip and knee on the affected side.

In some patients, the pain remains localized in the lowback and is usually bilateral but more severe on one side; but it may be unilateral, midline or about the same on both sides. It may be referred along the iliac crest, to the buttox, to the sacroiliac region, to the posterior thigh, popliteal space, calf, ankle or foot or even to all of the above. Often the pain begins in the back and after a few days or weeks, extends down the distribution of the gluteal and sciatic nerves. It may then leave the back en-

tirely and be present only in the lower extremity. There may be some tingling or numbness of the extremity and it may be colder than that on the normal side. The patient may complain of weakness, both in the back and in the affected extremity. In exceptional cases, there may be loss of sphincter control.

Those patients in which a list or a flexion deformity of the lumbar spine or hip is present may complain of a curvature of the spine, of one hip being prominent, or of inability to stand straight. Chronic cases not infrequently state that the pain extends up into the thoracic region of the back. Depending upon the severity of the pain and the patient's reaction to it, the patient may carry on his usual activities and be annoyed by the pain, he may confine his activities to light work and limit his exercise or he may be completely incapacitated and even confined to bed for weeks or months.

From what has been written above, it is evident that we consider the history very important. In fact, it may be even more important than the physical, x-ray and laboratory examinations and often the history is the most important factor in deciding upon the diagnosis and the method of treatment to be advised in a given case. Having completed the history, we now proceed with the physical examination. In doing this, we bear in mind the history which has been obtained from the patient and the fact that the abnormal physical findings vary directly with the severity of the pain at the time of the examination. He may be having no pain at the time of the examination and present nothing abnormal or he may be suffering so much that a satisfactory examination cannot be performed.

Our physical examination is usually limited to the back and lower extremities. These patients are not ill, nor do they complain of any symptoms which do not originate in the low back. The patient's back should be bared and his gait and posture noted. He may walk normally or he may walk with a marked limp, complaining of pain when he bears weight on the affected leg. When asked to stand erect, he may stand with his normal posture or may stand erect with a rigid, flat lumbar spine, or he may be bent forward or listed to one side and unable to stand erect or he may have difficulty in standing at all.

The patient is then asked to keep his knees straight and to bend forward, backward, to the right and to the left. The range



Fig. 1.

- a. Patient with moderately acute pain in the lowback and left sciatic distribution.
- b. Forward bending is markedly limited and causes pain in the back and lower extremity.
- c. Backward bending is slightly limited and causes pain in the lowback.

of movement and character of the movement in the lowback and hips are noted both during the bending and during the recovery. Likewise, the degree and location of the pain caused by each movement are ascertained.

With the patient lying on his back, first one and then the other leg is raised as far as possible with the knee straight and the range of movement permitted in each leg and the character and location of the pain produced by the straight leg raising are

Fig. 2.

- a. Bending to the left is moderately limited and causes pain in lowback and left lower extremity.
- b. Bending to the right is free and painless.
- c. The areas of tenderness are marked on the skin. At operation, a large, lateral extruded disc was found at the fourth interspace on the left.



noted. With the straight leg raised to a point where it causes slight pain, the foot is then dorsiflexed in order to determine whether or not this increases the pain. The knee is then flexed and the hip is flexed on the abdomen, rotated inward and outward, abducted and adducted in order to rule out symptoms arising in the hip. Atrophy of the thigh or calf and decreased temperature in the affected extremity are looked for at this time.

The patient is then turned upon his face and a pillow is placed under his abdomen in order to flex or flatten the lumbar spine. The spaces between the spinous processes in the lumbo-sacral region are then palpated for deep tenderness and the degree and location and possible radiation of the pain are noted. The deep palpation is then continued down over the buttox posterior thigh and calf on the affected side and areas of tenderness are noted. Each hip is then hyperextended in order to determine whether or not this causes pain in the low back.

He is then permitted to sit up and the knee jerks and ankle jerks are tested. The affected leg and foot are examined for hypaesthesia and the power of the extensor and flexor muscles of the foot and toes are tested.

Anteroposterior and lateral x-rays of the lumbo-sacral spine are then made and examined. No other laboratory examinations are necessary for a tentative diagnosis of an intervertebral disc lesion in the lumbo-sacral spine.

In an average case with moderately severe symptoms at the time of examination, the patient will stand with a flat lumbar spine and a slight list which is usually away from the side of the pain, but may be towards it. On attempting to bend forward or backward or towards the side of the pain, movement in the lowback will be markedly limited and will cause pain in the lowback and in the sciatic distribution on the affected side. He is usually able to bend away from the affected side without pain.

With the patient recumbant, the muscle spasm and list disappear. Straight leg raising is markedly limited and painful on the affected side and moderately so on the sound side. Dorsiflexion of the foot at the limit of painless straight leg raising on the affected side causes pain. With the patient prone, hyperextension of either hip causes moderate pain in the back. On deep palpation, there is moderate tenderness in the lumbo-sacral region which is most marked over the

affected disc. There is also tenderness in the buttox, posterior thigh, and calf.

Diminution or absence of the knee jerk, hypesthesia of the big toe and weakness of dorsiflexion of the foot or toes suggests a lesion of the fourth lumbar disc involving the fifth lumbar nerve root.

Diminution or absence of the ankle jerk, hypesthesia of the outer toes and outer side of the foot and weakness of the calf muscles (inability to walk or stand on the toes) suggests a lesion of the fifth lumbar (lumbo-sacral) disc with involvement of the root of the first sacral nerve.

The x-ray is taken chiefly to rule out destructive disease of the spine (neoplasm or infection) ankylosing arthritis, and fractures (especially spondylolisthesis). In a disc lesion of long standing, the x-ray may reveal a narrowing of the space between the bodies of the vertebrae, and the adjacent bone may be eburnated and the margins of the vertebral bodies may show a variable amount of osteophyte formation. Even here, however, the symptoms may be due to a neighboring disc which appears normal in the x-ray. We do not advise myelograms unless we think that we should operate upon the patient, and even then, we operate upon many of our patients with disc lesions without subjecting them to myelography. This is because the procedure is an added ordeal and expense to the patient and in our hands it is only about 70 per cent accurate. The final diagnosis is made only by revealing the disc on the operating table.

Having decided that the patient has an intervertebral disc lesion in the low back, we must now decide whether we should advise operative or conservative treatment. Unless the patient has failed to respond to adequate treatment administered elsewhere, we advise conservative treatment in the great majority of these patients and find that in about 80 per cent of them, operative treatment is not necessary.

CONSERVATIVE TREATMENT

The measures which we use in the conservative treatment of these patients are:

1. Rest. This is the most important measure available for the conservative treatment of these patients and many acute cases will recover if it is used early in the period of disability. The degree of rest prescribed must be adjusted to the severity of the symptoms. A patient with severe pain and marked disability should have uninterrupted rest in bed. This is most satisfactorily ob-

tained in a hospital and it may be combined with traction (about eight pounds to each leg). The bed should be equipped with a fracture board and a small pad should be placed under the lumbar spine and knees. In some patients, pillows under the head and dorsal spine and knees to maintain flexion of the lumbar spine, hips and knees, afford considerable relief.

If the patient is not much better after two weeks of rest, more radical measures (manipulation under anesthesia or surgical removal of the offending disc) should be considered. We do not think that prolonged rest in bed is apt to result in a permanent cure.

In a patient with mild symptoms, relative rest is obtained by having the patient avoid activities which aggravate the pain in the back or leg, especially prolonged standing, excessive stooping or lifting and athletics. In some instances, he should lie down for an hour or so during the day and in others a change of occupation is indicated.

2. A Fracture Board is placed beneath the mattress and on top of the springs. This is conveniently cut from a large sheet of plywood and its dimensions are those of the springs. Its purpose is to prevent sagging of the bed in the middle and it is most effective when it is used with a firm mattress (hair, felt or cotton).

3. Local Heat. This often has an analgesic effect, even when the heat is applied to the surface and the pain is deep seated. It may be furnished by hot fomentations, a heating pad, an infrared lamp or diathermy. Soaking in a tub of hot water for 10 or 15 minutes tends to relax the patient and to lessen the pain.

4. Medication. In very acute cases with severe pain which is not relieved by rest in bed, narcotics may be used to relax the pa-

tient and to relieve the pain to a point where he can get some rest. But habit forming drugs are used for only a few days and their use is avoided in the treatment of the chronic cases of low back pain with or without sciatica. We have seen several such patients who were addicts when they first came under our care. Acetylsalicylic acid or some other form of salicylate is the drug which we use most often for the relief of pain in the chronic cases and if the pain is unusually severe, this may be combined with codeine for a short period. Occasionally, we use some form of barbiturate or bromides if the patient is nervous or unable to sleep. We routinely prescribe rather large doses of Vitamin B for its tonic effect in all of the chronic cases.

5. Local Novocaine Injections. Occasionally, we have injected one per cent novocaine into the tender areas in the lumbo-sacral spine and in the buttox, but have not been impressed with its usefulness other than for temporary relief. And the same is true of the extrathecal injection of 50 or 60 ccm of one per cent novocaine through the sacral canal.

6. Manipulation. Some of these patients are relieved by manipulation of the low-back. The method we use is to have the patient lie on the affected side near the edge of the table or bed with the affected hip extended and the opposite (upper) hip flexed and this extremity hangs over the edge of the table; its dependent weight rotating the pelvis towards the affected side. The surgeon stands facing the patient and places one hand on the patient's shoulder and rotates the trunk backwards (away from the affected side). At the same time, the surgeon's opposite forearm or hand is placed on the patient's ilium and with a



Fig. 3.
a. Limitation of straight leg raising on the left. Dorsi-flexion of the foot with the knee straight increases the pain.
b. Straight leg raising on the right is also limited, but to a lesser degree than is that on the affected side.



Fig. 4. Myelogram demonstrating a large, extruded disc on the left at the fifth interspace. This was confirmed at operation. On the right, the spine is shown after the Pantopaque had been removed.

Fig. 5. Myelogram showing a large defect at the fourth interspace with almost complete blocking of the canal as seen in two planes. This was confirmed at operation. Three years before, a ruptured disc had been removed from the fifth space and the fourth space had been explored and found to be normal. The recent symptoms at the fourth space followed a severe back injury.

Fig. 6. A defect of the stricture or hourglass type at the fourth space. This is usually caused by a midline protrusion. Symptoms were left sided only and at operation, a left sided rupture of the fourth disc was found. This is considered a minor discrepancy. We find 8.3 per cent of minor and 21.9 per cent of major discrepancies in our myelograms.

quick movement, it is thrust downward and forward, thus rotating the pelvis forward (toward the affected side). This "lumbo-sacral twist" may be accompanied by an audible crunch in the lumbo-sacral region and may startle the patient, but it is rarely very painful.

The patient is then turned on the opposite side and the manipulation is repeated. This maneuver is usually performed without anesthesia and not infrequently is followed by a variable amount of relief which may be permanent. In other instances, it has no effect on the pain or disability. It is quite safe in that we have not seen it cause aggravation of the symptoms.

In an occasional patient, we manipulate the spine under general anesthesia. Then we stretch the hamstrings and sciatic nerve on each side by forcible straight leg raising to beyond 90 degrees and then forcibly hyperextend each hip by dropping and forcing the extremity downward after the supine patient has been pulled to the edge of the table. We then turn the patient on the side and perform the "lumbo-sacral twist" described above. Just as is the case with the manipulation without anesthesia, we are not able to predict the result of this procedure and when it is followed by relief, this may be only temporary. Consequently, we do not manipulate these patients under general anesthesia as frequently now as we did some years ago, when we believed that we were dealing with sacroiliac or lumbo-sacral sprains or subluxations.

After the manipulation, the back is strapped firmly with adhesive.

7. Support to the Back. The most immediate available and one of the most efficient

methods of limiting the movement in and of supporting or splinting the low back, is to strap it firmly with adhesive. The chief objections to this method are: 1. it may cause blisters or abrasions. This can be lessened by first painting the skin with tincture of benzoin, 2. it is uncomfortable and 3. its use prevents the use of local heat and of bathing in a tub or shower. Consequently, it is used only in acute cases.

A satisfactory method of strapping the low back is as follows: the patient is placed prone near the edge of the bed or table and a pillow is placed under the abdomen to flatten the lumbar spine and the skin between the anterior axillary lines and from the tenth thoracic spine to the middle of the sacrum is painted with tincture of benzoin. Then six or eight strips of adhesive, three inches wide and long enough to half encircle the trunk at the level where they are to be applied, are cut. These are not all of the same length. The first strip is applied to the buttox at the level of the trochanters, being applied on the near side and pulled tightly across while the skin on the far side is pulled towards the midline. A second transverse strip is applied above and overlapping this by about one and one-half inches. The strapping is continued upward until the three lower ribs are embraced by the adhesive. The patient may then be lifted to his feet and assisted to dress, care being taken not to loosen the adhesive by flexing the hips or spine. The adhesive should be left on for about 10 days or more. Then it can be removed without tearing the skin.

A fair emergency support is afforded by a wide (10 or 12 inches) woven elastic

bandage (Ace or Adapto) applied snugly around the lumbar and sacral regions.

In most instances where a support for the low back is desirable, we prescribe a reinforced canvas belt for the men and a corset for the women. The garment should have a solid back with stays which can be molded to the patient and straps or laces in front in order that it may be tightened. It should be cut out in front to permit sitting and some bending.

In instances where a more rigid support seems indicated, we immobilize the lowback in a plaster of Paris jacket. This has roughly the form of the canvas belt described above (Signet ring). It is applied with the patient standing with the lumbar spine flattened or flexed and the abdomen retracted. This is accomplished by having him stand facing a pipe or hook in the wall and then grasp this and sway backward while the knees are held straight and the feet remain close to the pipe or wall. It is then cut out in front to permit sitting and some bending and may be worn for two months or more.

8. Postural Exercises and Back Stretching. After the more acute symptoms have subsided and the patient is returning to an approximately normal existence, he is given a series of exercises which tend to strengthen the abdominal and back muscles and to improve his posture and correct the lumbar cordosis. The back stretching is accomplished by having the patient lie on his back and flex both knees on to the chest, pulling them up with his hands and holding them there for a few seconds. This is repeated five to 10 times, twice daily. If any of the exercises aggravate the pain, such exercises are discontinued.

9. General Measures. The patient's general health is also our concern. He is advised in regard to his diet and an effort is made to control his weight and to make it as near the normal as possible. He is advised to protect the back from abnormal strain and to avoid those activities which cause pain in the back or sciatica. He is taught to use his knees and leg muscles in lifting and to avoid bending forward from the hips and lifting with his back.

From what has been said above, it is evident that we can do a good deal for these patients in the way of conservative treatment and that we temper our treatment to the circumstances and personality of the pa-

tient, as well as to the severity of the symptoms. We try to avoid over treating these patients, but when their pain continues, something in the way of active treatment is necessary, otherwise they get worried and seek relief from irregular practitioners.

We realize that our most important ally is time and that if the patient will only wait long enough, the pain will in many instances, subside spontaneously. Of course, it may recur later, but most patients will not wait very long unless some effort is being made to relieve their pain. That is the reason that they seek relief from the cults. We have operated upon so many patients with intervertebral disc lesions who have had repeated osteopathic or chiropractic adjustments that I believe that manipulations should not be repeated too often because while they may afford temporary relief, they may also cause additional damage to the diseased disc and promote the patient's progress to a situation where operative removal of the disc is necessary if he is to be comfortable and active again.

Under a regime of conservative treatment, as described above, from 80 to 90 per cent of these patients will get along very well. There will remain from 10 to 20 per cent who will not be satisfied with partial relief and will not tolerate the restrictions to their activity imposed by the pain and disability in the low back. These are candidates for operation. We explore the lumbo-sacral canal under local anesthesia and remove the offending disc or discs. We do not fuse the spine. The use of local anesthesia and the omission of the spinal fusion almost eliminates postoperative shock and shortens the convalescence. They are up within a few days and usually walk out of the hospital in about eight or 10 days after the operation.

The results of our operative treatment compare favorably with those of most elective major surgical procedures. In our series of over 500 cases, we have had excellent or good results in about 80 per cent, fair results in about 15 to 18 per cent, and poor results in from two to five per cent. One patient died from a staphylococcic septicemia and endocarditis. This was before penicillin was available. We now consider this an unusually safe procedure and have had no cases of foot drop or of extensive sensory paralysis caused by operative damage to the nerve roots. Nor have there been any cases of postoperative meningitis.

THERAPEUTIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Urology and Pharmacology*

UROLITHIASIS

BASIL A. HAYES, M.D., JAMES M. TAYLOR, M.D.,
AND H. A. SHOEMAKER, PH.D.

DR. SHOEMAKER: The topic for discussion this afternoon is urolithiasis. There are three phases in the therapeutic management of any case of urolithiasis: First, the relief of the acute conditions; second, the removal of the calculus; and third, the measures which would tend to prevent a recurrence of the condition. We will ask Dr. Hayes to discuss the relief of the pain resulting from a calculus.

DR. HAYES: When a patient complains of severe renal colic, we never know for certain whether he has a stone. He could have a ureteral blockage resulting from reasons other than a stone, such as pressure from a tumor in the abdomen or pelvis. Pain may arise from a hypertropied ureter which has doubled back upon itself and formed a kink. A ureter may be blocked by ptosis of the kidney. Any of the above may produce pain as severe as that of stones. I have seen a few cases of renal colic which followed the ingestion of beer; strangely enough, more than any other alcoholic liquor. All of these would be either a mechanical obstruction or a spasm of the ureter. In a few instances, I have seen renal colic come from the bladder itself, that is, an inflamed trigone, which causes the ureter to go into spasm resulting in a block. Relief consists of measures planned to do one of two or three things: One, to open the ureter, which in most instances we attempt to do with antispasmodic drugs such as atropine. I use large doses of atropine, 1/100 or even 1/75 of a grain, and accompany it with an opiate. If you happen to have papaverine available, it is a good drug; one grain of papaverine and 1/75 grain of atropine will relieve most

people. If it doesn't, I would, without hesitation give enough morphine to relieve the pain because that is what they want.

One can relieve some cases, if it is due to an inflamed bladder, by treatment of the bladder itself. For example, I have seen relief come from merely putting argyrol in the bladder, but that isn't very often. Bed rest and quiet are important, but the primary thing is an opiate accompanied by an antispasmodic drug, and of all of them I like atropine best.

DR. SHOEMAKER: The second problem is the removal of calculi in the urinary tract when they occur. We will ask Dr. Hayes at this point to discuss the methods of removing urinary calculi.

DR. HAYES: Urinary calculi can occur in the kidney, in a ureter, in the bladder, or even in the urethra. They may occur on one side or both sides. Before anything is done one must know how many calculi are present and where they are. We do that by means of the cystoscope and x-ray. If we have a simple stone in one kidney and it is small enough to pass, we usually do not do anything except give the patient plenty of water to drink, advise exercise — a reasonable amount of it — and wait, because nine out of ten small calculi, if they are in a favorable location, will eventually pass. If it is out in the calyx or in the lower calyx, particularly, it may never pass. It stays there and keeps growing and finally has to be removed surgically. If the calculus is in the ureter and is small and causing little pain (some don't cause any) then again I would wait. It may come out itself. If it does not, I think the patient should be cystoscoped, and many times following a simple passage of a ureteral catheter the calculus will pass with a week or two. If it doesn't I would dilate the ureter with a bougie and then wait a while. If this is not effective we would use a stone

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

remover. The best type I have seen is that first described by Dr. Ellick, who I believe is now in San Francisco. He tied a silk thread to the end of the catheter and passed the catheter and thread up the ureter. The stone would, in a high percentage of cases, get wedged in between the silk thread and the catheter and one could manipulate it down. Dr. Akin here in Oklahoma City has improved on that. He runs a guitar string through the catheter, bends it back down so that the wire, catheter and all are not much larger than just the catheter. It has the advantage over the silk thread of being stiff so that one can pass the whole thing up the ureter, and then by holding the catheter and the wire and pushing up one or the other, one can spring them apart a little, the stone will get between them and can be pulled down. I have delivered stones by this method in the office. It is a very good procedure and will succeed in removing the calculus in a majority of cases. In other cases if you fail with this method, it is a very good idea to leave a catheter lying in the ureter. That has a softening and dilating effect on the ureter. If you leave it in 24 hours and then take it out (some urologists leave it in longer), the stone will often pass spontaneously in a week or 10 days. These are the simplest things you can do. There are other gadgets on the market. There are stone baskets and dilating machines of various kinds, for instance the Johnson stone basket. You pass it up the ureter and the stone will lodge in between the wires and you can pull it down. I don't like this one. There are many things that urologists can buy — many are barbarous inventions and in some instances may be dangerous as well as impractical. I would try the methods I have mentioned and if they fail, I would resort to surgery.

There is no point in going into the technique of surgery here, but to remove a stone from the ureter is simplicity itself in most instances. If it is in the upper third of the ureter you use the same incision one would make to approach a kidney. Make one in the ureter right over the stone — you can usually palpate it — remove it, and you don't have to sew the ureter back together. Of course if the calculus is big and the ureter is dilated, I would take one or two small sutures to bring the edges together. If the stone is in the lower third of the ureter I think the best incision is a midline incision just as we do for a retropubic

prostatectomy. That is the one Hinman has always used, although many use the lateral incision similar to an appendectomy incision only longer. We peel the peritoneum medially and when you have found the ureter and can palpate the stone, incise the ureter and remove it. I like the midline incision because I can approach a longer length of the ureter.

If the stone is too big for the manipulations I have mentioned and you know it isn't going to pass anyway, there is no use in waiting — operate and take it out because that is the least dangerous thing for the patient. Supposing you have a stone in the kidney and in the ureter — begin at the bottom, taking the lower one out first as a general rule. If you have stones in both kidneys, then the question is which are you going to remove first? We usually select the kidney with the poorest function. That gives you the good kidney to help the patient through the operation. After you get it out of the poor kidney its function will be improved and you can go in and take the calculus out of the other one. If you have stones in both ureters the same rule would apply. Obtain a function test in all cases if possible by injection of indigo-carmin and watching it through a cystoscope or by the intravenous PSP tests. Occasionally you are influenced by other things; for instance, if the pain on one side is severe and the other doesn't hurt, then the patient isn't going to feel very good about it if you operate on the side that isn't hurting. He wants you to relieve his pain. Many things enter into your judgment.

Stones in the bladder can occasionally be dissolved with Subey's solution. You can get a catheter in the bladder and, if it is a calcium phosphate stone, it isn't difficult. You just keep washing, roil the solution around with one of the big evacuators through a resectoscope sheath and you will get a lot of material out that way. If you have hard stones that will not disintegrate this way and they are less than a half inch in diameter, one can usually use a stone crusher. Remember you can't pass it with the telescope in place. You pass it like a sound, turn it over, and then insert the telescope. You can look through the telescope and see the jaws. Now open them, reach down and grab the stone and crush it. It is a good instrument for stones less than one-third of an inch in diameter. For stones larger than that I wouldn't undertake the removal with

a lithotrite of any kind. I would do a suprapubic operation and remove it.

DR. SHOEMAKER: Dr. Hayes, you mention disintegrating calculi in the bladder and washing them out. Occasionally one hears discussions about trying to dissolve calculi in the kidney or in the ureter. Is that ever successful?

DR. HAYES: In the ureter, I wouldn't think it would be successful at all. In the kidney if you have a drainage tube through a nephrostomy incision, one can pass a catheter from below and irrigate regularly with a fair degree of success. The important point is to have a two-way approach. That is, the water should go in one place and come out the other. If you just run a catheter up into the kidney, inject a solution and let it come back out, it is a very dangerous thing to do. There is trauma to the kidney and infection intervenes, at least that is the opinion of most men. I have tried it once or twice, but I got faint-hearted and didn't keep it up very long. I usually had to go in and take the stone out, so I think generally speaking it isn't considered good practice.

DR. SHOEMAKER: When you consider the chemical composition of many of these stones you can readily see why trying to dissolve or disintegrate them to wash out the fragments is not very successful.

The other phase which we are going to discuss this afternoon is the prevention of recurrence. If an individual has once had a calculus in the urinary tract, he is very likely to experience a recurrence. I am going to ask Dr. Taylor to discuss this phase of the problem.

DR. TAYLOR: The prevention of recurrence of calculi has been a problem confronting urologists for a long time. There have been many articles written about it. It would be very nice if we could say that it is practical and feasible to do so. A good many of the measures that have been suggested and have worked with some people are practical and some are not. Some of them are more or less scientific in viewpoint but not very practical, particularly in dealing with people who are not under your entire control. Therein hangs most of our trouble, because so many patients come from areas where you cannot have close supervision over them for a long period of time. Any measures that are instituted must be checked constantly to see that they are being properly carried out. After a few weeks the patient usually loses interest and begins to slip off

his routine. Unless they are interested and conscientious in their own behalf, then your efforts are not going to be very successful. Various figures have been quoted. One man that I happen to know says that he has reduced the incidence of recurrence from somewhere around 40 per cent to 16 per cent. That is all very well. You will find out shortly that you can make figures do anything. You can find statistics on almost any aspect of anything to back up your contentions. The actual proof of this is a very difficult thing to ascertain because the ordinary patients are not followed over a long period of time. One doesn't see these people periodically for five and 10 years, and one cannot know whether or not they have a recurrence. One can write to them, many have moved and left no forwarding address, and that is the end of your search. Many patients who develop recurrences are unhappy about it and they feel that you didn't do all that you could or should have done. They go elsewhere and you never hear of them again. You may be counting one man as a fine example of success and he may have been to two or three physicians in the meantime, and may have had more operations. All these intangibles have to be considered in the problem of prevention of recurrences. There may be more actually recurring than you may know about.

The things to be done, first and foremost in any problem, is to know *why* they had the first stone. If you can answer that problem and correct the condition that caused it, then you have a fair chance of preventing a similar thing. If you do not know what caused the calculus and cannot correct that condition, then it is quite likely that no matter what you do the patient will have another stone. The problems involved are several and probably there are two or three things that have more influence on stone formation than any other items. The first is stasis of urine. Anything which interferes with a free, normal drainage of urine from the calices to the meatus is conducive to stone formation. The second is infection. An infection itself is tied in with the problem of stasis, because if you get free drainage of urine it is hard to keep infection active and you can get rid of most of them. When you have trouble getting rid of infection, you can almost be assured that there is some obstruction and consequent stasis. The third problem is that of metabolism. If somebody is either excreting too much of a certain type of mineral or is unable to handle it adequately

ly (an example of that is in the stones of recumbancy), he is likely to develop stones — orthopedic patients particularly. In people with spinal fractures or fractures of the femur, who are not able to be up and around and must remain in bed for weeks at a time, particularly if they are immobilized in long plaster casts, decalcification occurs very rapidly, calcium is excreted through the urinary tract and it is quite easy for them to develop stones. There is of course the problem of recurrence if they have once had a stone. If you can ambulate these people and eliminate the factor that caused them to have their stone, you can prevent recurrence of that type.

The second thing you need to know is what kind of a stone did they have. There are three or four predominant stones. Of course the most common are the mixed stones with predominantly calcium phosphate and a sprinkling of other mineral elements. There are not many pure stones. We probably see more of them in the very small stones which are relatively pure, that is, composed of one compound, but if they have been present any length of time sooner or later the other mineral elements in the urine will begin to be deposited on them and form layers, which you can see in sections or in radiographs. In large calculi there is one layer after another of salts deposited, and of course in those cases most of the later deposits are the calcium and phosphorus crystals. It may be on a uric acid basis in the beginning; it may be on an oxalate basis, and there may occasionally be pure uric acid or pure oxalate calculi. Having removed the stone it is essential to know the chemical composition of that stone. Therein too is another large factor, in that this is not a simple process. A great many people do not have access to laboratories. People come in and have their stones removed, then they are sent home without a determination of the composition because the laboratory does not have proper facilities to analyze these calculi. If a stone is predominantly calcium phosphate, being a calcium stone one of the problems then is to try to reduce the amount of calcium in his system by giving him a low calcium diet. If it is a uric acid stone, give him a low purine diet. Try to eliminate the excess uric acid in the blood stream. If it is an oxalate stone, reduce the oxalates in the diet. Those are simple measures which as I say may be begun but it is very difficult to keep people on any kind of restric-

tive diet for any length of time. They lose interest in it, they fail to see the necessity for continuing indefinitely with this process, a little bit of this and a little bit of that won't hurt them, and soon they slip off their diet completely.

If we can find out why they had their first stone and know the composition of it, the third problem, and perhaps the most important of all in the prevention of recurrences, is to leave that patient with proper drainage. That is, do not leave him with some surgically produced interference with drainage that will cause him to have another stone. If you are removing a stone from the ureter it is essential to know that that ureter is open and free to drain below that point. If you leave a stricture in the ureter and there is a stone above it, the stone is removed and nothing is done to the stricture, of course then he is quite likely to have further trouble and another stone. A stricture should be treated, one way or another, and the time surgery is done is the time to correct it. If there is an obstruction at the ureteral-pelvic junction and there is a large stone in the pelvis of the kidney as a result of stasis, plastic procedures to correct the obstruction are essential to the operation or he can expect a recurrence.

One of the most common types of recurrence is not a true recurrence at all, but a fragment of stone or entire separate calculus which is not recognized and is not obtained at the time of surgery. Therefore we feel that it is essential that people having operations for stones should have an x-ray plate made before they leave the hospital following surgery. If there are fragments of stone present at that time and they show in the picture, that cannot be called a recurrence. When he comes back a year later and the stone is much larger, you can't say he had a recurrence. He has the stone that was left behind and it is merely enlarged, so that it is essential to remove all possible fragments of stones regardless of whether it be kidney, ureter or bladder.

These things — the correction of whatever condition he had that caused him to have the stone, the elimination of excess of the type mineral found in the stone from the diet, and the surgical correction of whatever defects may be present — are probably the three essential items.

Other things have been suggested and one of them of course is the use of Vitamin A. Vitamin A has to do in one of its aspects with the proper growth and well being of epithelium, and in the urinary tract it has been demonstrated, at least in laboratory animals and in some cases of humans, that a Vitamin A deficiency exists in these people. If such can be corrected the epithelium does not have the breakdown that allows the mineral elements to be deposited over the raw areas on the renal papillae where most kidney stones originate. By correcting that particular deficiency their trouble may be alleviated.

Measures then are three: (1) correction of defects, (2) the elimination of provocative minerals from the diet, and (3) the use of Vitamin A. Vitamin D should not be given combined with Vitamin A. It should be administered separately for better control of dosage, because an excessive amount of Vitamin D will tend to reproduce the condition you are attempting to correct. You can produce an over-excretion of calcium and you can produce calcium stones as a result of too much Vitamin D. Anything which contributes to the patient's general well being is good treatment. If he is living on a faddish type of diet or if he is living an entirely sedentary life, or if he is doing too much of this and not enough of that, anything that affects his general condition should be taken into consideration and corrected. Of course infections may have a part in it and such things as infected teeth, and obvious things that turn up in general checkups should be remedied.

The most dangerous type of recurrence comes within the first two years. If you can get them past the first two years after surgery, then they have a pretty good chance of going an indefinite time without further stone formation. If you can't follow them indefinitely but can follow them at least two years, you will probably help things considerably.

Dr. Hayes has already commented on one of the things that has been utilized in the prevention of recurrences and that is the use of various irrigating solutions such as Subey's solution. We also use dilute solutions of phosphoric acid and acetic acid through drainage tubes either in the bladder or in the kidney. Where a large fragmented stone has been removed and it is felt that there is a little sandy deposition still present, if

you can flush that kidney or bladder thoroughly for a matter of several days with that solution, you have a better chance of removing these little foci or nidae around which further stones can be created. Attempts have been made to eliminate stones in the kidney by putting one or two or three indwelling uteral catheters and irrigating through one and out through the other. One of the problems that has come up of course is that the solution used for this irrigation has been involved only in the mineral aspects of it. The matrix of the stone, which is composed entirely of organic material, is not affected. One of the things that has been suggested by Dr. Keyser, who was here two or three years ago at our Clinical Conference and has done considerable work from that aspect, is the use of 0.5 per cent solution of urease, alternating with Subey's solution. Irrigate with one, then the other.

Many will come in and say that they have an acid condition or acid urine. The urine should be normally acid and they don't realize it. They all feel that taking citrus fruits because of the citric acid involved is what makes the urine acid, and of course it doesn't do anything of the kind. They have an alkaline reaction in their system. If you have a man who has a tendency to form calcium phosphate stones, you want to keep his urinary pH down to a low level, and the excessive ingestion of citrus fruits therefore would not be indicated because it would tend to keep it on a higher level.

DR. SHOEMAKER: Dr. Hayes, do you have anything to add to Dr. Taylor's discussion of the preventions of recurrences?

DR. HAYES: No, I don't think so. He said the urinary tract should be left to drain well and remove all granulating surfaces and inflammatory areas, which goes without saying.

DR. TAYLOR: One thing I forgot to mention is the acidity and alkalinity problem involved in stone formation. Most stones are composed of calcium phosphate and those people concerned should have their urine maintained at as low pH as is convenient. You can do that by the use of an acid-ash diet, which again is one of those effective things if you can get people to eat it. It is a very robust diet containing large amounts of meat as a rule, and a lot of people are just not constitutionally able to eat that much. The idea of course is to give them

enough of the foods which produce an excess of acids and avoid those foods which are high in alkaline ash. In addition to that, if necessary and if you cannot maintain acidity by a diet, you can give them such things as ammonium chloride. Urinary antiseptics of course should be considered. Whatever type of infection is present should be treated by whatever antibiotic is indicated. If you can relieve the infection then you have a better chance of preventing recurrence. If the stones are acid in type, then their diet should be such that their urine is slightly on the basic side but not too much so, because you may precipitate calcium phosphates. They should be watched and balanced and their urine should be examined at frequent intervals to rule out the possibility of or presence of infection and any excessive crystalline matter which will show up.

QUESTION: How frequent are urinary calculi seen in patients with what is otherwise a subclinical type of hyperparathyroidism?

DR. TAYLOR: As far as the problem of hyperparathyroidism is concerned it has always seemed to me like you were groping in the dark. Actually the number of cases of hyperparathyroidism that have been reported, that is, those people with actual hyperparathyroid adenomas, is not very large. When you consider the tremendous number of people who have stones and you check all their blood chemistry and look for these things (some of them have been explored surgically), and nothing has been found, the problem of hyperparathyroidism in relation to urinary calculi is negligible. Certainly if they do have true hyperparathyroidism they are quite likely to have calcifications in the kidney, but everybody with calcification in the kidneys certainly is not a candidate for hyperparathyroidism, which is a rather rare entity. If you have hyperparathyroidism you probably will have the stones, but certainly not the other way around.

DR. HAYES: In connection with hyperparathyroidism, I have had several worked out thoroughly and have never been able to prove the presence of the disease in the first place. That was when enthusiasts on the subject were working them out too, so if they didn't find it I don't think anybody would. And the next thing, even when they operated on such cases, and again I am referring to enthusiasts now who think they

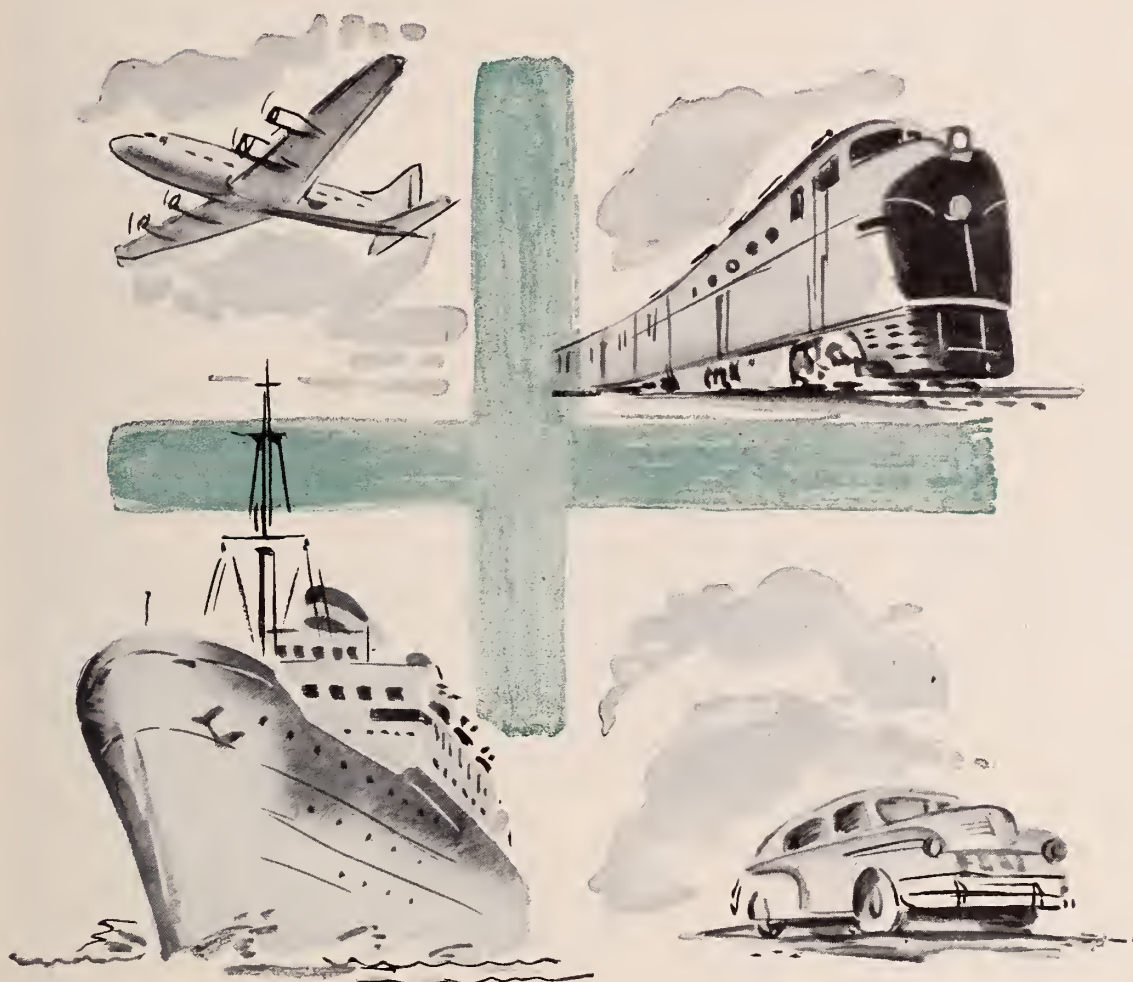
know about it, they didn't find the tumor; so it is a pretty impractical business and I think their batting average is zero.

QUESTION: Are calculi associated with other symptoms or enlarged prostates?

DR. HAYES: In my experience, not too frequently. I find them every now and then, but usually the patient doesn't know he has calculi. His prostate overshadows the other trouble. Naturally the prostate causes obstruction of the urinary tract, and if he has it long enough or if he gets an infection associated with it, he may have stones. But considering how many prostates we see and relatively how few of them have stones, I would say that is not very important in that particular disease.

DR. TAYLOR: We don't see a great many, and I think perhaps not as many are seen now as there were 15 or 20 years ago. Of course stones are formed behind an obstruction and you may have an obstruction other than prostate, but not all bladder calculi are associated with an enlarged prostate. You may have diverticuli of the bladder or a heavily distended bladder as a result of pressure, and small calculi are much more likely to develop than if the process had not gone on for a period of 10 or 15 years. But, by and large, the percentage of combination of stones and enlarged prostate is not very high.

DR. HAYES: I might add another word or two about that. In transurethral resection of the prostate it is rather important to know whether there is a stone there or not. Of course you can see it the moment you look in, for that matter, if there isn't a big median lobe. I have made the sad mistake of going in and trimming out the prostate and then finding that there was a stone in there which I couldn't get out. Then I had to do a suprapubic because I couldn't crush it. You can't see well in a bladder if it is oozing. So I have a strong feeling that anyone who is going to have a transurethral prostatectomy should at least have a flat plate made of the bladder to see whether there is a stone present. In any other type operation it is not important at all because you can get it out very easily at the time of surgery if there is one. You can do it peritoneally, retropubically or suprapubically, and if it is in the bladder it is simple to remove the stone right at the time.



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RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

President's Page

What is the essential requisite which enables a physician to render the greatest service to his patient? Is it a pleasing personality, the acquisition of scientific knowledge, technical skill, or diagnostic insight? No, it is none of these. It is simple honesty. All of these other qualifications may be attained in varying degrees but without honesty where do they lead — to unprofessional showmanship and salesmanship.

We justly criticize individuals professing to practice the healing art who because of their inadequate skill, training and experience, or wilful misrepresentation, present panaceas where there is no relief, cures where there is no cure, without consideration of the patients welfare simply furthering their own selfish ends. So long as the practice of medicine is continued on an honorable plane in these respects, we hold no fear of its being superseded by cults, isms, or fads.

If a physician lacks the facilities necessary for complete study and better diagnosis of a given problem he may enlist the help of his confreres. Sometimes it requires courage to suggest consultation because of possible misinterpretation of that suggestion.

Just as honesty is a requisite in dealing with patients, so must it be the guide in dealing with our fellow practitioners. A double responsibility rests on the physician to whom a patient is referred or one to whom a dissatisfied patient turns. He has the responsibility to the patient which we fully appreciate, and likewise to the physician which perhaps is not so readily appreciated. Criticism has been made that on occasion the referring or former physician and his opinion are or may be lightly regarded or that he is not always informed as to what is being done to the patient. Let the consultant avoid such criticism by giving careful consideration to both the patient and the physician. In the final analysis the patient's welfare comes first and honesty remains the essential requisite.

George H. Garrison
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Special Article

WHAT YOU SHOULD KNOW ABOUT MEDICINE

LEWIS J. MOORMAN, M.D.

OKLAHOMA CITY

Medicine was not sired by government. On the contrary it found its birth in "The primal sympathy of man for man". Thus it became one of the most sacred of all human relationships, ranking with the Divine right of worship. When this relationship is interfered with, medicine's highest function is lost.

Modern medicine has reached its present state of efficiency through an evolutionary process. It is not the result of government planning and like religion and freedom of speech, it cannot survive government control. Through new discoveries, sanitary engineering and preventive measures it has kept abreast with progress in other fields of endeavor and made it possible for us to survive the coming of "one world" with the intermingling of the nations with their varied racial diseases and susceptibilities. Medicine has followed the course of nature not the mandates of government. It has met the needs of mankind as they have arisen.

The function of medicine has been stifled wherever government control has arisen. Experience in other countries shows that the cost of government medicine rises as the quality falls. There is no such thing as free medicine except that voluntarily tendered by the patient's private physician, at his own expense, according to his present privilege as a free agent. The sum total of this free service if paid for by the government would reach deep into the taxpayer's pocketbook and rob the physician of the chastening influence of this voluntary service. Without exception nationalization of medicine has been associated with national decline. Only in small countries with homogenous socio-economic conditions has socialized medicine attained seeming success. But it has been observed that the people from these countries live longer when transplanted to the U. S.

where they have the benefit of voluntary medical service under our system of free enterprise. The United States is the most heterogeneous nation in the world and its citizenry the most independent, therefore, the least adaptable to any form of socialized medicine. It is well known that nationalized medicine, like other functions of the welfare state, destroys individual initiative, honor and integrity, discourages thrift and lessens the will to produce. Thus the socialistic trend now threatening the integrity of free enterprise in the United States will reverse the character building principles upon which our republican form of government was founded. From a medical standpoint this is important because successful medical care is dependent upon full cooperation on the part of both patient and physician.

The hue and cry about the shortage of physicians is largely a result of political propaganda. The United States has more physicians in proportion to population than any other country in the world except Palestine where the profession is surcharged with refugee doctors. We have the best system of medical education and the most nearly adequate medical school facilities in the world for the training of physicians. The fear of a serious shortage of physicians in the future is obviously unfounded unless we enter another national emergency. The Federal Security Agency's bulletin recently published under the title, "Health Service Areas" ostensibly to forecast the alleged shortage of doctors by 1960 is founded on false premises. It is inaccurate in its local appraisals and estimates, and as has been suggested, it seems to have been molded to fit "assumed conclusions". This is significant in that the survey has cost the taxpayers a lot of money and its false conclusions are being employed to mislead the people and to

highpower medical schools into Federal subsidy and the accompanying danger of control. Also the report unjustly becomes a part of the Federal Security Agency propaganda for compulsory health insurance. The same agency and socialistically minded politicians are overplaying the need of doctors in rural communities. This propaganda has penetrated the public mind and needs to be analyzed and counteracted by fair presentation of the facts. In Great Britain soon after the Health Act went into effect it was realized that the strain on the treasury, the profession and on the nursing service might be eased "quite as much by reducing the number of patients as by increasing the number of nurses and other services." This is an example of what the cold, impersonal hand of bureaucracy can do to people once they come under the rule of the welfare state.

Those who think doctors have deliberately limited the number of medical graduates should know that the number is determined by physical limitations of teaching facilities and not by the doctors engaged in medical education. The required buildings, laboratory equipment and hospital beds are very expensive. More graduates will be forthcoming when the people provide cash for the necessary facilities. This should come from local sources, either through appropriations by state legislatures or public philanthropy. During the past few years according to an editorial in the *New England Medical Journal*, seven four year medical schools have been added to those already in operation and five more are contemplated.

There are good reasons why doctors are not locating at the crossroads in rural communities as they did 50 years ago. Before the turn of the century the country doctor could make a living on typhoid fever, diphtheria, pneumonia and summer complaints. Immunity measures provided by medical discoveries have virtually eliminated typhoid and diphtheria. Sulfonamides, penicillin and aureomycin and other new drugs, have rendered pneumonia much less ominous for the patient and much less profitable to the doctor. Refrigeration, sanitation, and improved medication have almost eliminated summer complaints. Improved roads, automobiles, and transportation by air, plus education with reference to clinics and hospitalization

tend to whisk the patient by the country doctor while he is being penalized by the new medical publicity and motorized psychology. Considering modern transportation the country patient 50 to 100 miles from the nearest city relatively speaking is much closer to medical care than the patient living 10 miles from his country doctor fifty years ago. Under these circumstances, it is hardly fair to expect the well trained young doctor to invest 30 to 50 thousand dollars for sufficient modern facilities to stop the motored marathon toward city doctors. Are the people and the trend of the times to blame or must the medical profession be held responsible for the dearth of country doctors?

The communities in need of good doctors and desirous of scientific medical care should consider the feasibility of providing modern facilities for the well trained young doctor when one is available. Many of the medical schools are now encouraging students to consider the need of general practitioners in rural locations. Our own medical school is now stimulating interest in country practice by placing senior students with selected general practitioners in rural communities for valuable experience and training.

Apropos the alleged shortage of doctors it seems reasonable to consider the health and physical competency of the nation in the calculation. The population of the U. S. has been doubled since 1900. Average longevity is increasing at a rapid rate. At the turn of the century the lowest maternal mortality rate was 4.3. In 1947 the highest rate was 2.6. At the present time the whole national socio-economic status is being seriously upset by the increased birth rate, (sign of physical competency) the saving of life in infancy and the pyramiding of the old age group. Already the burden of old age pensions may be charged to the doctors. Certainly physicians are largely accountable for the above mentioned gains, whether they be considered national credits or debits. But the government gives no credit for these advances and paradoxically cries out for better medicine. The bureaucrats might do well to shoulder the responsibility of finding a better way of life for the ever increasing number of people who because of good medical care live longer and move faster than ever before. Must the people and the phy-

sicians accept a system of medical care which will rob them of the scientific, moral and spiritual values which have been responsible for the best medical service in the world. With the known inaccuracies of government bureau surveys and investigations and the administrative incompetency so flagrantly displayed from time to time and the susceptibility to political expediency does it seem reasonable to place our health and our lives in the cold impersonal hands of a government agency.

Our own Indian medical service supplies a shocking example of government failure. Though better managed and more adequately financed the medical department of the Veterans Administration has many shortcomings. Every effort has been made to bring it as nearly in line with civilian practices as government red tape allows and yet many a well meaning VA physician is still struggling through time consuming paper work toward patient welfare. These medical services should have careful study before compulsory health insurance is considered.

Forgetting medicine except as the administration's proposed beachhead for the conquest of all independent industry, should not every loyal citizen take his stand on the question of free enterprise based as it is on the sound principles laid down by our Founding Fathers.

Think of Jefferson, who wrote the Declaration of Independence and championed the constitution of the United States. Think of Washington, who with modesty matching his valor, declared his reluctance to accept the presidency because of the responsibility of building a republican form of government designed to keep alive the "sacred fire of liberty" and forever furnish a haven of safety from "oppression and misrule". Think of John Marshall who sought to safeguard these principles in the conduct of the supreme court. And finally of Lincoln who left so many burning words mounted on the imperishable wings of truth. Is it not time to listen while this great champion of liberty

speaks? "You cannot strengthen the weak by weakening the strong." . . . "You cannot help the poor by tearing down the rich." "You cannot keep out of trouble by spending more than your income." "You cannot build character and courage by taking away a man's initiative and independence." "You cannot help men permanently by doing for them what they could and should do for themselves." This might well be considered the citizens Bible brought from polygot jargon and political parleying into plain English. If these principles are put into practice they will afford full protection against the threat of socialized medicine and give a free people their only remaining chance to successfully defend themselves against the catastrophe of the welfare state.

In addition to medicine's routine care of the sick, rich and poor, it has voluntarily become "the guardian of health and life itself". Through the sleepless critical pursuit of scientific research it has thwarted disease, minimized suffering, stayed the hand of death and doubled average longevity. Its phenomenal discoveries, once proven beneficial to humanity, have been made available without thought of commercial gain.

Through scientific advances, medicine has provided the principles for progress in public health and social medicine and has pointed the way for government participation. Finally, it may be said that the medical profession in the United States, conscious of the changing socio-economic picture is actively encouraging all voluntary insurance programs in an effort to help meet economic emergencies ever arising on account of illness in the lower income groups. Approximately one fourth of the people in the U. S. now have Blue Cross hospitalization insurance. Approximately 15,000,000 are protected against surgical emergencies by Blue Shield and many others are protected by voluntary plans offered by the nation's great free enterprise insurance industry. In the last analysis, our souls, our health, our hopes are dependent upon free enterprise.

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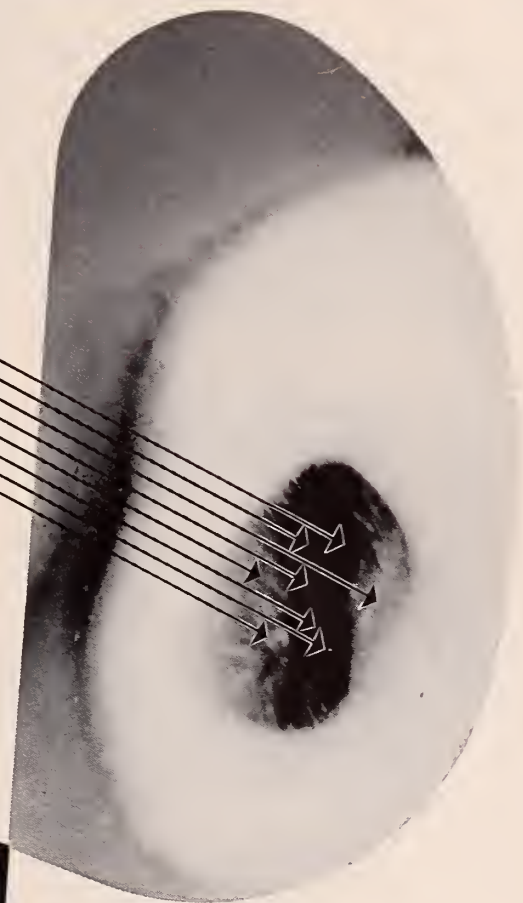
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PUBLIC RELATIONS REPORTER

COMPULSORY HEALTH INSURANCE — 1883 — 1950

This is a brief chronological outline of the agitation for compulsory health insurance, published in answer to requests for such information in abbreviated form. Please keep in mind that this includes only the comprehensive, all-out compulsory health insurance legislation. The many "fringe bills" which would be opening wedges for socialized medicine cannot be covered in this limited space.

- 1883 Compulsory health insurance was originated in Germany by Bismarck. Its purpose was two-fold — to raise revenues and to bring the people under the control of a paternalistic government.

- 1912 Compulsory health insurance was first proposed in the United States as a platform plank of the Bull Moose (Progressive) Party of Theodore Roosevelt.

- 1912-1920 One of the groups which had agitated for the compulsory health insurance plank of the Bull Moose Party made attempts in 15 state legislatures to pass some form of compulsory health insurance, plus wage-loss indemnity. All were based on the German pattern established by Bismarck — state operation under federal supervision.

- 1927-1932 Committee on the Costs of Medical Care appointed by President Hoover to study economic problems connected with sickness. This group did not recommend compulsory health insurance.

- 1934 The U. S. Senate ratified the section of the League of Nations treaty which made this country a member of the League's International Labor Office, a bureau which had socialized medicine as one of its announced objectives.

- 1935 Agitation for compulsory health insurance was renewed. This was part of the leftist infiltration of the period. Some of the agitation is directly traceable to the I.L.O. connection.

- 1939-1942 Three bills for federal subsidies to states, providing compulsory payroll deductions, wage-loss cash indemnity and cash refunds to patients were introduced in Congress. All failed.

- 1943 The first Wagner-Murray-Dingell bill was introduced. It would have made the Surgeon General of the United States Public Health Service the czar of a national compulsory health insurance system. This bill abandoned state control.

- 1945 S. 1050 (the second Wagner-Murray-Dingell bill) calling for a 4% payroll tax was introduced. This provision frightened the public. S. 1606 was substituted for S. 1050, eliminating the cost figures but retaining the Surgeon General as czar.

- 1947 S. 1320, the fourth Wagner-Murray-Dingell bill, was introduced. This made a pretense of returning to state control, but actually would have set up the Federal Security Administrator in complete control of the system instead of the Surgeon General. This bill died with the 80th Congress.

- 1948 President Truman asked Federal Security Administrator Oscar Ewing for a report on the nation's health and a suggested national health program. Ewing called a National Health Assembly (and tried to exclude the medical profession from this meeting). However, medicine protested and Ewing was unable to obtain a recommendation for compulsory health insurance from this conference. Following the National Health Assembly, the Ewing Report was issued, outlining a ten year health program and calling for compulsory health insurance, even though the Assembly did not recommend it and the report was ostensibly based on the findings of the Assembly.
- 1949 The fifth Wagner-Murray-Dingell bill, S. 5, was presented to Congress. It was identical to S. 1320 of the 80th Congress. Three months later another compulsory health insurance bill, S. 1679, was introduced. Hearings have been held on this bill but no action has been taken on it. Unless it is brought up this session, it will die with the 81st Congress.
- 1950 In addition to S. 1679, there are bills pending in Congress which propose a form of socialized medicine for a particular group (such as U. S. school children) or which propose federal domination of some segment of the medical profession. These fringe bills illustrate the technique so successful for the Fabian Socialists in England: that of achieving Socialism bit by bit rather than all at one time, never at any time calling it Socialism but candy coating it as welfare and benefit legislation.

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| 2. Horseback Riding | 6. Volley Ball | 15. Special Events |
| 3. Crafts | 7. Golf | a. Sing Songs |
| a. Leather | 8. Tennis | b. Stunt Night |
| b. Wood | 9. Folk Dancing | c. Camp Fires |
| c. Metal | 10. Basketball | 16. Social Recreation |
| 4. Fishing | 11. Life Saving | 17. Hobbies |
| a. Fly | 12. Music | 18. Photography |
| b. Casting | 13. Arts | |

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J. Shirley Sweeney, M.D., F.A.C.P.
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OKLAHOMA FIRST STATE MEDICAL ASSOCIATION TO APPROVE AMERICAN MEDICAL ASSOCIATION DUES

RECOMMENDS AMENDMENT OF BY-LAWS AT ANNUAL MEETING JUNE 4, 1950

Special session of the House of Delegates of the Oklahoma State Medical Association was called Sunday, March 19, in Oklahoma City, on authorization of the Council. Only business specified in the call and considered by the House was the matter of collection of dues for the American Medical Association.

The House of Delegates unanimously approved a resolution making payment of the 1950 dues levied by the American Medical Association necessary to the maintenance of membership in the Oklahoma State Medical Association and its component societies. By this action the Association became the first to take official action in support of the A.M.A. levy.

Below are the official minutes of the meeting.

The House of Delegates of the Oklahoma State Medical Association met in a special called meeting Sunday, March 19th, 1950 in the Home State Life Building at 10:00 A. M.

Doctor McHenry called the House to order and announced that the only matter to be considered by this House of Delegates was membership and dues in the American Medical Association. Doctor McHenry stated that the A. M. A., late in 1948, at a meeting of the House of Delegates, voted an assessment on the membership for the year 1949, and that that assessment was made an assessment on the membership of the Oklahoma State Medical Association at a special meeting of the House of Delegates a year ago. He stated that over 95 percent of the members of the Oklahoma State Medical Association had paid that assessment. He further stated that at the session of the A. M. A. House of Delegates in December, 1949, the By-Laws of the A. M. A. were amended to provide for dues for the first time in 103 years.

The Speaker called upon Doctor George Garrison for a statement of the objectives of the meeting. Doctor Garrison pointed out that the meeting was called at the direction of the Council to consider whether or not the State Medical Association wished to make payment of dues mandatory and to consider the method of handling the collection of the dues of the A. M. A. Doctor Garrison stated that following the meeting of the House of Delegates a meeting of officers of county societies would be held.

The Speaker announced that the Secretary-Manager of the American Medical Association, George F. Lull, M.D., had been invited and was present to give information in regard to the workings of the A. M. A. and its relationship to the state associations.

Doctor Lull was introduced and stated that the question of dues is of interest to every physician who belongs to the A. M. A. He pointed out that heretofore no dues had been charged by the A. M. A. and that if a physician joined the county and state societies he automatically became a member of the A. M. A. Dues were charged if he desired to be a Fellow of the Scientific Assembly and in order to be a member of the House of Delegates a physician had to be a Fellow for which he paid \$12.00 and received the Journal. He gave some history of the A. M. A., stating that it was founded in 1846 with the prime objective to improve medical education. Doctor Lull stated that the A. M. A. makes a survey at regular intervals which takes three years, of all medical schools and hospitals to be approved by the A. M. A. \$150,000 is the cost of the survey.

Doctor Lull pointed out that the A. M. A. publishes

a Cumulative Medical Index for libraries and medical institutions which costs \$75,000 a year to publish. The Bureau of Health Education is run on a budget of \$100,000 a year to educate the public by putting out educational material and make the public aware that there is an A. M. A. He stated there is no income in the Bureau of Health Education. He pointed out that the Washington Office of the American Medical Association had been enlarged both in personnel and headquarters. The Bureau of Medical Economic Research does a great job but again there is no income from that Bureau.

Continuing, Doctor Lull stated that many of the specialty journals lose money but as a group they make money. He pointed out that at the request of the House of Delegates they were conducting an educational campaign financed by the \$25.00 special assessment and to be financed by the dues this year. In conclusion Doctor Lull stated he had given them this background to show the necessity for dues.

The Speaker asked for questions from the floor which Doctor Lull might answer. Many questions were asked and the answers given and discussed by Doctor Lull.

The Speaker asked Doctor Garrison to give the report of the Council to the House of Delegates regarding A. M. A. dues. Doctor Garrison stated that at a meeting of the Council it was recommended that the A. M. A. dues be made mandatory. He then read the two following resolutions which the Council presented to the House for consideration.

1.

A. That this House of Delegates recommend to the House of Delegates to be convened on June 4, 1950, amendment of the By-Laws to provide that the payment of dues levied by the American Medical Association shall be necessary for maintenance of membership in the Oklahoma State Medical Association and its component societies.

B. If the above recommendation is made, this House of Delegates, by resolution, provides that the payment of dues levied for 1950 by the American Medical Association shall be necessary for maintenance of membership in the Oklahoma State Medical Association and its component societies for the year 1950.

2.

This House of Delegates recognizes the desirability and necessity for the levying of dues by the American Medical Association. The action of this House of Delegates at this time is that the payment of such dues to the American Medical Association shall not be necessary to the maintenance of membership in the Oklahoma State Medical Association and its component

societies. This House of Delegates however, encourages the payment of dues to the American Medical Association by the members of the Oklahoma State Medical Association on an individual voluntary basis.

Motion: Malcolm Phelps, M.D.

"I move that Resolution 1, both parts A and B be adopted by this House of Delegates."

Motion Seconded: Onis Hazel, M.D.

General discussion of the motion included a number of questions which were answered by Doctor Garrison, by Mr. John Hart, the Associate Executive Secretary, and by the Speaker and by members from the floor. Two amendments to the motion were offered. One suggested limitation of the amount of A. M. A. dues to \$25.00 annually and limitation of the action proposed to one year only. The second concerned technicalities regarding assessment and collection of A. M. A. dues for 1950. The first amendment was defeated by vote of the House. The second was lost for want of a second. A summary of the pertinent information brought out by the questions and by the discussion of the proposed amendments is given below.

SUMMARY

Since it is the function of the House of Delegates at each annual meeting to assess and fix the amount of dues for members of the State Association for the following calendar year, the passage of the proposed amendments to the By-Laws (Part A of Resolution 1) would necessitate the assessment and collection of A. M. A. dues along with the State Association dues for the year 1951 and ensuing years unless later changes are made in the By-Laws.

The A. M. A. Constitution states that the annual A. M. A. dues shall not be more than \$25.00 per year. Any proposed amendment of the A. M. A. Constitution must be proposed to the A. M. A. House of Delegates and held over for one year before it can be enacted. The By-Laws of the State Association may be amended by the House of Delegates at any annual meeting. Therefore, since the House of Delegates is proposing to amend only its By-Laws, ample time would be available to the State Association to take whatever action it might desire in regard to future changes in the A. M. A. Constitution regarding dues or assessments.

Since nearly all of the State dues for 1950 have been collected, the passage of Part B of Resolution 1 will have the effect of making the 1950 A. M. A. dues a special assessment of the State Association. The method of collection and the dates for collection will have to be determined by the Council unless otherwise ordered by the House of Delegates at the annual meeting in June. In either event, if Part B of Resolution 1 is passed by the House of Delegates, the State Association, according to its own By-Laws, will not be able to accept a member's dues for 1951 until he has paid the 1950 A. M. A. dues as well as the State Dues for 1950.

Following the above outlined rather lengthy discussion Doctor S. D. Neely called for a standing vote upon the motion to adopt Resolution 1, both parts A and B.

The motion carried without a dissenting vote.

Motion: E. H. Shuller, M.D.

"I move that this House of Delegates request the

Executive Office to summarize the information contained in the questions and answers and disseminate that information to the entire membership of the Association."

Motion Seconded: S. D. Neely, M.D.

The motion was discussed and it was agreed that such a summary would be included in the minutes of the meeting which would be published in the Journal of the Association before the annual meeting in June.

The motion was lost.

Doctor Garrison introduced the Councilors and Vice-Councilors from each of the 14 Councilor Districts.

There being no further business the House of Delegates adjourned at 12:00 noon.

Respectfully Submitted,
L. Chester McHenry, M.D.
Speaker of the House

Reported by Rosalee Baskins

INTERNAL MEDICINE COURSE RECORDS GOOD ATTENDANCE

The Internal Medicine course which is now being given in Ponca City, Tulsa, Bristow-Sapulpa, Cushing-Stillwater and Guthrie will close in that area May 26. The attendance in the first four circuits of instruction, by Robert M. Becker, M.D., has been excellent with an average of 89 per cent.

At the close of this circuit Doctor and Mrs. Becker will vacation in Canada, returning to resume his lectures in Northwestern Oklahoma the latter part of June. Centers in this area will be Euid, Watonga, Alva, Woodward and Guymon. The date and time in each place will be announced later.

This is the sixth biennial postgraduate program to be offered the physicians throughout the state by the Postgraduate Committee of the Oklahoma State Medical Association with the cooperation and financial assistance from the Oklahoma State Health Department and The Commonwealth Fund of New York.

Doctor Becker will be in the state approximately one more year to complete his lectures in the western half of the state. The Postgraduate Committee is now working on plans for another two-year program. This program will be on a subject that the majority of the physicians over the state have requested.

NOTICE

Oklahoma State Medical

Assistants Society

One Day Conference

June 4th, 9:00 A. M. through, 5:00 P. M. Skirvin Hotel. Reception Saturday night, June 3rd. Speakers, Business Meeting, Luncheon. All doctors' assistants invited to attend.

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**A.M.A. COMMERCE DEPARTMENT
SURVEYS PHYSICIANS' INCOMES**

Physicians are urged to cooperate with the Bureau of Medical Economic Research of the American Medical Association and the Office of Business Economics of the U. S. Department of Commerce now jointly conducting a survey of physicians' incomes.

The Bureau has been authorized by the A.M.A. Board of Trustees to cooperate in this survey, which the Department of Commerce had planned to conduct alone. It will be the first full-scale survey by the department of physicians' incomes since 1941.

An analysis of the results will be published by the Department of Commerce next fall in its monthly publication, "Survey of Current Business." Previous issues published similar analyses of surveys of incomes of dentists and lawyers.

There is evidence that the national averages in some surveys have been too high because physicians who do not have bookkeepers to fill out questionnaires do not reply in sufficient numbers. Accordingly, the Bureau emphasizes the importance of all doctors, especially those with a relatively small practice, filling out the questionnaires.

Accurate postwar data on physicians' incomes is badly needed in order to develop better estimates of how much the American people pay to physicians.

Every physician can be assured that the survey has no relation whatever to the operations of the U. S. Bureau of Internal Revenue. There is no way by which the Department of Commerce could have obtained the needed information from the Bureau of Internal Revenue; hence, the questionnaire survey.

**MEDICAL SCHOOL OFFERS
CARDIOLOGY COURSE**

A three day course devoted to the study of the heart will be offered at the University of Oklahoma School of Medicine, 800 Northeast Thirteenth Street, Oklahoma City, Oklahoma, June 1, 2, and 3, 1950. This course will be open to all interested physicians. It is being planned for those physicians who practice in the general field as well as those who limit their practice.

Two prominent guest instructors have been obtained for the course. They are Dr. George C. Griffith, Clinical Professor of Medicine and Coordinator of Teaching Cardiovascular Diseases, University of Southern California School of Medicine, and Dr. Irvine H. Page, Director of Research at the Cleveland Clinic, Cleveland, Ohio. Dr. Griffith is one of the foremost medical teachers in the country and has had a wide range of experience in the field of cardiology. Dr. Page is co-author of the "General Practice Manual on Arterial Hypertension". He has devoted most of his life to the study of hypertension, and is one of the most prominent authorities in the country on this subject.

Topics to be covered during the course will include the following: hypertension, congestive heart failure, congenital heart disease, coronary heart disease, and rheumatic fever.

The enrollment fee for this course will be \$15.00. A detailed program and registration card will be mailed to all Oklahoma State Medical Association members soon.

DO YOU KNOW?

That members of the Northwestern Counties Medical Society were the first to send in their dues 100 per cent for 1950? There are 18 members of the society which is an amalgamation of physicians in Beaver, Harper, Ellis, Dewey and Woodward counties.

HAWAIIAN TOUR TO FOLLOW A.M.A.

Complete day-by-day itineraries for the A.M.A. post-convention tour of the islands after the San Francisco meeting have been printed and sent to travel representatives throughout the country to serve as first-hand information for trip planners among physicians attending the A.M.A. Further information can be obtained from Dr. W. John Holmes, P. O. Box 2274, Honolulu, T.H.

FIFTH COUNCILOR DISTRICT HAS SCIENTIFIC-SOCIAL PROGRAM

More than 30 physicians and their wives from counties in the Fifth Councilor District attended the meeting in Clinton March 16. Counties in the district are Beckham, Blaine, Canadian, Custer, Dewey and Roger Mills. O. C. Standifer, M.D., Elk City, is councilor and A. L. Johnson, M.D., El Reno, is vice-councilor.

An afternoon program of entertainment for the doctor's wives was held and a Fifth Councilor District Auxiliary was organized. Mrs. Harold Tisdal, Clinton, was named Councilor for the Auxiliary and Mrs. McLain Rogers, Clinton, was elected Vice-Councilor.

The afternoon program for the doctors included a movie on kidney function and the following speakers discussed scientific topics: Irving Humphrey, M.D., Wichita Falls, "Oxygen Therapy;" Herman Stone, G.D., Oklahoma City, "Pernicious Anemia;" James T. Lee, M.D., Wichita Falls, "Diverticulitis of the Colon;" Phil McNeill, M.D., Oklahoma City, "Diagnosis in Chest Conditions."

A get-together with the ladies at 6:30 preceded the dinner. Paul Gallaher, M.D., Shawnee, spoke on "Psychosomatic Medicine" at the dinner. Ralph McGill, M.D., Tulsa, O.S.M.A. president-elect presented a life membership certificate to E. M. Loyd, M.D., Taloga.

NAMED PROFESSIONAL RELATIONS DIRECTOR

Miss Velma Neely, former supervisor of the hospital case department for the Oklahoma Blue Cross-Blue Shield Plans, has been named professional relations director for the organization. As professional relations director Miss Neely will devote full time to visiting hospitals and physicians in the state answering questions about Blue Cross and Blue Shield Plans.

NEW MEMBERS

Physicians becoming members of the Oklahoma State Medical Association during March, 1950 included:

F. W. Gross, M.D., Lindsay
Leon M. Altaras, M.D., Shawnee
W. S. Cary, M.D., Reydon
Herbert A. Wilson, M.D., McAlester
Dayton M. Rose, M.D., Okemah
Robert L. Meiers, M.D., Sayre
Howard M. Cohenour, M.D., Tulsa

COUNTY MEDICAL SOCIETY OFFICERS MEET IN OKLAHOMA CITY

Officers of all county and district medical societies in the state were invited to attend the special session of the House of Delegates Sunday, March 19, as guests in order that they might be fully informed of any action in regard to collection of the American Medical Association dues.

In the afternoon, following the special session, a conference of county medical society officers was held to acquaint them with their duties and relations with the State Association.

Ralph McGill, M.D., Tulsa, President-Elect of the State Association, pointed out to the county society officers the many advantages of amalgamation of smaller societies in district organizations. He emphasized that more satisfactory scientific programs could be presented, more interest of the members secured and much more effective action taken on matters affecting the profession, through the larger amalgamated groups. George H. Garrison, M.D., Oklahoma City, O.S.M.A. President, outlined to the conference the great value of the Auxiliary in the accomplishment of the purposes of the Association. Doctor Garrison placed much emphasis that more satisfactory scientific programs could be done by those Auxiliaries which are now active and the much more effective work which could be done throughout the state if every county society would promote the organization of an Auxiliary and provide it with direction and encouragement.

The problem of inducing physicians and their wives, as well as other professional and business people, to register and vote in all elections was thoroughly discussed. It was pointed out that surveys made in other states in this connection have been most discouraging. The group was advised that plans for a survey to determine the situation in Oklahoma in this respect are underway. It was common agreement that the profession cannot expect to effectively deal with the constant threat of government intervention unless its members are active in their exercise of the right to vote.

Many more of the problems of county medical society officers were discussed among which were the various types of membership in the State Association, requirements for maintenance of county and district medical societies, the adoption of constitutions and by-laws and issuance of charters and the processing of membership applications.

HOSPITAL CHIEF RETIRES

After more than 50 years of service as Central State Hospital superintendent, D. W. Griffin, M.D., has sent his official request for retirement to the Oklahoma Mental Health Board. He completed his 50th year as the hospital's administrator in October, 1949.

Doctor Griffin came to Oklahoma in 1889 to be resident physician at the private sanitarium formerly located on the present grounds of Central State Hospital. When the sanitarium was purchased by the state in 1915, Griffin was retained as superintendent. The private sanitarium, prior to 1915, served the state on a contract basis in the care of the mentally ill. The hospital, which served 362 patients when Doctor Griffin arrived, is now caring for more than 3,000 patients.

GI Bill medical school enrollments have been dropping over the past three years, but at a much slower rate than the decline in veterans' college enrollments as a whole.

OBITUARIES

EDWIN AYERS KELLEAM, M.D.

1881-1950

Edwin A. Kelleam, M.D., Wright City, died March 28 at the home of his son, Joseph E. Kelleam, Edmond.

Dr. Kelleam was born in Charleston, Ark. He received his medical degree at the University of Louisville in 1906 and began his practice in Arkansas. In 1907 he moved to Grant, Choctaw county. Dr. Kelleam also practiced in Boswell, Sallisaw and Garvin. In 1927 he entered the Indian service and served for 13 years in Arizona, Oklahoma and South Dakota. He was a life member of the Oklahoma State Medical Association, a member of the Woodmen of the World and the Modern Woodmen and a life member of both the Masonic lodge and the Royal Arch Masons. He was a member of the Presbyterian church.

Survivors include his widow and one son, one sister and a granddaughter.

W. H. FREEMAN, M.D.

1855-1950

Wiley H. Freeman, M.D., pioneer physician and land owner, died in Sentinel, Oklahoma, March 6, 1950, at the age of 94. Believed to be the oldest living graduate of Vanderbilt Medical School, he was one of two remaining graduates of the class of 1882. Doctor Freeman was born September 9, 1855.

After his graduation, Doctor Freeman began the practice of medicine in Era, Cook County, Texas. From there he moved to Lockney, Floyd County, Texas, where he practiced until his retirement. During his 30 years as a practicing physician, Doctor Freeman served as president of the West Texas Medical Association and was vice-president of the Texas Medical Association at the time of his retirement.

Doctor Freeman held life membership in the American Medical Association, the Texas Medical Association, and was elected to honorary membership in the Oklahoma State Medical Association in 1937. Doctor Freeman believed in keeping abreast with his profession and availed himself of frequent post graduate courses and the benefits of meetings of the American Medical Association, as well as county and state.

His forebearers came from Virginia about 1800, and for six decades in the growing west he served as a physician, civic and church leader.

Doctor Freeman was an active Mason in both Oklahoma and Texas, and served as the first Worshipful Master of the Masonic Lodge of Lockney, Texas. He was a member of the Sentinel Rotary Club, Chamber of Commerce and the Christian Church.

His companion of 70 years preceded him in death only five weeks, having passed away February 1, 1950. Both Dr. and Mrs. Freeman were devoted Christians, industrious, frugal and benevolent. With the passing of such pioneer citizens a new era presses its demands upon us. Shall we serve as loyally in our day as did they in theirs?

Two daughters survive, Mrs. Lee Ozburn, Oklahoma City, and Mrs. Mack Miller, Dallas, Texas. An only son, I. S. Freeman, M.D., an active practicing physician in Oklahoma, preceded his parents in death.

VERN H. MUSICK, M.D.

1900-1950

Vern H. Musick, M.D., an Oklahoma City physician since 1927, died March 27 after a two weeks illness.

Dr. Musick, who was associate professor at the University of Oklahoma School of Medicine, specialized in gastroenterology. Receiving a BA degree at the University of Missouri in 1921, he was graduated from the medical school at Northwestern University in 1926. He served his internship at Kansas City General hospital in 1926. He was a member of Sigma Xi and was active in other medical organizations.

He was a member of May Avenue Methodist church. A veteran of World War I, he was also a member of the American Legion and 40 et S.

Surviving are his widow of the home and two daughters. A brother Elmer Musick, M.D., also survives.

ALFRED E. METSCHER, M.D.

1894-1950

Alfred J. Metscher, M.D., Enid, died suddenly March 14. Death was attributed to coronary disease and Dr. Metscher had been in good health and had been at his office and attended to hospital work the day of his death.

Dr. Metscher was reared in the Fairmont and Covington community. He received his degree from Washington University School of Medicine. Later he taught school and studied ophthalmology in Europe. He attended school in Belgium, Germany and Denmark. He came to Enid in 1936.

D. W. MILLER, M.D.

1867-1950

Daniel W. Miller, M.D., a practicing physician in Blackwell since 1901, died February 25.

Dr. Miller was a member of the state board of medical examiners for 22 years. A charter member of the Knights Templar of Blackwell, he served that organization as its third Eminent Commander and was a Mason. He was a member of the Rotary club for many years. Dr. Miller had been Sunday school superintendent of the Christian church for 45 years.

J. A. BENTLEY, M.D.

1872-1950

J. A. Bentley, M.D., Allen, died February 27 at his home.

Dr. Bentley had practiced medicine for 53 years when he retired in 1947. He began his practice in Orr, near Healdton, but moved to Stuart before statehood. He practiced there for several years before beginning his practice in Allen in 1926.

Survivors include his widow, one son, six daughters, one brother, one sister, 16 grandchildren and three great-grandchildren.

ROBERT MILTON ALEXANDER, M.D.

1870-1950

R. M. Alexander, who was recently awarded a lapel pin for 50 years in the practice of medicine, died March 8.

A pioneer Paoli physician, Dr. Alexander practiced in Henryetta before moving to Paoli. He attended college at the University of Georgia and was born in Carnesville, Georgia June 21, 1870. He practiced medicine in Georgia for 10 years before coming to Oklahoma.

Three daughters and two sons survive.

MEDICAL SOCIETIES AROUND THE STATE

Pittsburg County

A group of Auxiliary members entertained the Pittsburg County Medical Society and Auxiliary with a dinner at the home of Dr. and Mrs. L. S. Willour, McAlester, celebrating doctor's day. Following the dinner, an informal program was presented in which doctors were cast in the roles of other professions.

Tri-County

Members of the Choctaw-McCurtain, Pushmataha County Medical Society held a March meeting in Antlers.

Kay-Noble

Physicians in the Kay-Noble County Medical Society were honored by the Auxiliary at the March meeting held at the Ponca City Country Club. Marking the celebration of Doctor's Day, members of the Auxiliary were in charge of the program.

Garfield-Kingfisher

A scientific program featuring a symposium on male and female sex hormones was held at a recent meeting of the Garfield-Kingfisher Medical Society in Enid. Those taking part in the discussion were Frank C. Lattimore, M.D., Kingfisher, Mark D. Holcomb, M.D., Enid, Leonard F. Shryock, M.D., Enid, and Lilliau H. Robinson, M.D., Enid.

Stephens County

C. M. O'Leary, M.D., Oklahoma City, was guest speaker when Dr. and Mrs. James L. Patterson and Dr. and Mrs. E. G. King entertained members of the Stephens County Medical Society and Auxiliary at a dinner in

the Magnolia room of the Chisholm Trail hotel in Duncan.

Lincoln County

Members of the Lincoln County Medical Society met March 2 at Meeker. A dinner was held at City Cafe with a business meeting afterward in the offices of Harold Baugh, M.D., president of the society.

Blaine County

Robert Shuttee, M.D., Enid, was guest speaker on polio at a recent meeting of the Blaine County Medical Society. D. L. Richardson, M.D., was elected vice president and president-elect. Virginia Curtin, M.D., was elected secretary. Charles L. Rogers, M.D., is president.

Cleveland County

Cleveland County Medical Society was entertained at a dinner meeting March 30 by the Auxiliary in celebration of Doctor's Day. George H. Garrison, M.D., O.S.M.A. President from Oklahoma City, was guest speaker and presented a charter to the Society. Excellent attendance was reported. The meeting was held at the Copper Kettle.

Haskell-LeFlore County

Another Auxiliary honoring its physicians on Doctor's Day was Haskell-LeFlore. A dinner was held at the home of Dr. and Mrs. Bill Cotton of Poteau.

Alfalfa County

The Alfalfa County Medical Society has recently announced its support of the Blue Cross-Blue Shield community enrollment in that county.

ANNOUNCEMENTS

KANSAS CITY SOUTHWEST CLINICAL SOCIETY. A merit award to interns and residents in medicine in the general area of Kansas City has been established. Basis for the award will be a paper written during his service by a resident or intern. First prize will consist of \$500 and second prize \$100. Third prize is \$50. Each paper must represent original work and be submitted to the judges before September 1.

AMERICAN BOARD OF OBS.-GYN. General oral and pathology examinations (Part II) will be conducted at the Shelburne, Atlantic City, May 21 through May 27. Applications are now being received for the 1951 examinations.

INTERNATIONAL POSTGRADUATE MEDICAL ASSEMBLY OF SOUTHWEST TEXAS. Annual meeting will be held in San Antonio January 23, 24, 25, 1951.

FOURTH ANNUAL SYMPOSIUM ON FUNDAMENTAL CANCER RESEARCH. University of Texas M.D. Anderson Hospital for Cancer Research. One half day will be devoted to selected papers on the subject of

isotopes in cancer research. **CANCER PATHOLOGY CONFERENCE.** University of Texas Postgraduate School of Medicine on "Tumors of Muscle Origin". **SOUTH CENTRAL REGIONAL MEETING OF THE COLLEGE OF AMERICAN PATHOLOGISTS.** May 12-13 Texas Medical Center, Houston, Texas. Further information may be obtained from William O. Russell, M.D., 2310 Baldwin St., Houston, Texas.

OKLAHOMA STATE MEDICAL ASSOCIATION. June 5, 6, 7. Municipal Auditorium. Oklahoma City. House of Delegates June 4.

AMERICAN MEDICAL ASSOCIATION. June 26-30. San Francisco.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1, 2. Oklahoma City.

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE. Three postgraduate courses in gastroenterology and cardiology have been scheduled to begin at 2 p.m. in various state centers. April 27 a gastroenterology course will be offered in Bartlesville with cardiology courses slated for Woodward May 4 and Enid, May 25.

BOOK REVIEWS

MANUAL OF HUMAN DISSECTION (Shearer), edited by Charles E. Tobin. Second Edition, 286 pp. Philadelphia, The Blakiston Co., 1949.

The second edition of this popular dissection manual offers as its most conspicuous change the bold-face typing of all important anatomical terms; thus it answers at once a pressing student problem, "What is important?" This book is frankly adapted to the sharp decrease in time now allotted to Gross Anatomy, as witness its 1340 (est.) index entries compared to those estimated in the indexes of Spalteholz Atlas (4785) and Cunningham's Textbook (5832). Such curtailment has been and is a useful and signal achievement of the Shearer book. Criticisms to follow are collected notations of our staff after completed laboratory experience with the book, and are advanced here not in a spirit of cavil but as proffered help to whom it may concern. Students are puzzled by "saw through the clavicle at the outer edge of the deltoid" (p. 24); we direct them to employ the *medial* edge, since we ourselves cannot recognize the outer edge. Again (p. 31) "detach the clavicular insertion of the levator scapulae" (a muscle not inserted on the clavicle); Shearer (ed. 1) transects this muscle about its middle as we do. The incision through the latissimus dorsi of ed. 1 we regard as better than that of ed. 2; in general we prefer not to cut muscles at or near their origins or insertions. A useful sentence of ed. 1 (p.31), omitted in ed. 2, refers to the spleenius muscle: "Between the sternomastoid and the trapezius it is relatively superficial and forms the floor of the upper part of the posterior triangle." A worthy addition to the new book is dissection of the suboccipital triangle (p. 36). Why ignore the otic ganglion and the ansa subclavia? "In the dissecting room subject, as soon as the parietal pleura is opened, the pressure of entering air causes the lungs to shrink etc." (p. 90); in our long-housed subjects the lungs have already shrunk, though usually they have not collapsed, nor do they collapse on opening the pleural sac. The right crus of the diaphragm is said to lie behind the highest part of the stomach (p. 149); actually it is the left crus. This book needs to define "the urogenital diaphragm." As a staff our most emphatic disagreement with Dr. Tobin concerns his summary dismissal of *Colles' fascia* and the *superficial perineal pouch* (p. 170); first and third paragraphs of this page seem to pose a distinction without a difference. I have seen evacuated a superficial perineal abscess, extending forward from para-anal pus, and dissecting skin and superficial fat away from a deeper stratum, which later excluded the abscess from the superficial pouch. What was this deeper stratum, if not Colles' fascia? A welcome change from Shearer (ed. 1) is the study and dissection of pelvic viscera, male and female, by midline section. The previous method of Shearer left all pelvic viscera as a whole on one side of the sectioned pelvis, a mutilating operation that accomplished little. On p. 189 (ed. 2) "the *suspensory (proper) ligament of the ovary*" is incorrect; the suspensory ligament of ovary is one structure; the proper ligament of the ovary, on p. 191 called the ovarian ligament, is quite another. Of four new figures 15 is the posterior view of the female pelvis from Sobotta-McMur-

rich), 54 and 56 are midline sections respectively of male and female pelves, 60 is a somewhat disheveled dissection of the flexor forearm and hand. All others of the 79 figures are original drawings made by Dr. Shearer from described dissections. We regard his figures as clear, accurate and on the whole excellent; without them the book would doubtless soon share the oblivion of other unillustrated texts on anatomy. Shearer ed. 1 bears on its title page the notice: "Illustrated with original drawings by the author." The present edition does not carry this or any notice as to drawings. In fairness it should. Despite its acquired errors, the Shearer Manual (ed. 2) remains our best adaptation to the prevailing extreme parsimony of dissection time.

—C. F. De Garis, M.D.

QUINIDINE IN DISORDERS OF THE HEART, Harry Gold, M.D. New York, Paul B. Hoeber, Inc. Medical Book Department of Harper and Brothers. 115 pages.

This little volume affords easy, interesting and profitable reading. It is divided into 26 short chapters or sections and contains an adequate chronological bibliography. The monograph, according to the author, is planned for the general practitioner, and is based upon "experience with successes and failures, reading and reflection — teaching in laboratory and clinical pharmacology — pharmacologic and clinical research; the cure of several thousand cardiac patients".

In the first section Gold tabulates those cardiac disturbances in which quinidine is effective: Premature contractions, auricular, nodal, ventricular; paroxysmal auricular, nodal and ventricular tachycardia; auricular fibrillation and flutter; and ventricular fibrillation. The next five sections are devoted to the pharmacologic and toxic actions of the drug and the effect upon the electrocardiogram, absorption, elimination, and tolerance. Then comes a detailed discussion of dosage and maintenance. This is followed by a comprehensive consideration of the various disturbances of rhythm and their specific treatment. There is a brief discussion of the use of quinidine in acute myocardial infarction and in thyrotoxic disorders. The section on anesthesia and surgery seems especially valuable in view of the frequency of disorders of rhythm under these conditions. The final sections are devoted to preparations and routes of administration.

I repeat, this monograph affords easy, interesting and profitable reading.—Wann Langston, M.D.

HONORARY MEMBERSHIP

The following applications have been received for Honorary Membership:

F. W. Ewing, M.D., Muskogee, Oklahoma
Pleasant P. Nesbitt, M.D., Tulsa, Oklahoma
J. H. White, M.D., Muskogee, Oklahoma

Attend the Annual Meeting
June 4, 5, 6, 7
Oklahoma City

LIFE MEMBERSHIP

The following applications have been presented for Life Membership. The applications are in order for presentation to the Council and the House of Delegates:

- Frederick Addison Anderson, M.D., Claremore, Oklahoma
- Leila E. Andrews, M.D., Oklahoma City, Oklahoma
- A. M. Arnold, M.D., Claremore, Oklahoma
- Roscoe C. Baker, M.D., Enid, Oklahoma
- William C. Bryant, M.D., Chouteau, Oklahoma
- A. W. Clarkston, M.D., Valliant, Oklahoma
- N. L. Cornwell, M.D., Coyle, Oklahoma
- J. W. Craig, M.D., Miami, Oklahoma
- A. Dixon, M.D., Hennessey, Oklahoma
- Paul E. Haskett, M.D., Oklahoma City, Oklahoma
- William C. Gilliam, M.D., Spiro, Oklahoma
- G. R. Gerard, M.D., Chickasha, Oklahoma
- S. J. T. Hines, M.D., Tahlequah, Oklahoma
- A. F. Hobbs, M.D., Hinton, Oklahoma

AMALGAMATIONS

The following have made application for amalgamation or dissolution. All requirements have been met and the petitions are in order for presentation to the Council and House of Delegates:

- Carter-Love-Marshall County Medical Society. All requirements have been met and petitions are in order for presentation to the Council and House of Delegates:
- Carter-Love Marshall County Medical Society—(Amalgamation).

- L. H. McConnell, M.D., Altus, Oklahoma
- G. M. McVey, M.D., Verden, Oklahoma
- James L. Miner M.D., Tulsa, Oklahoma
- S. W. Minor, M.D., Hinton, Oklahoma
- A. M. Mixon, M.D., Spiro, Oklahoma
- M. V. Moth, M.D., Oklahoma City, Oklahoma
- D. W. O'Leary, M.D., Norman, Oklahoma
- C. S. Petty, M.D., Guthrie, Oklahoma
- John S. Pine, M.D., Oklahoma City, Oklahoma
- Arthur S. Piper, M.D., Enid, Oklahoma
- Benjamin W. Ralston, M.D., Commerce, Oklahoma
- John A. Reck, M.D., Oklahoma City, Oklahoma
- James F. Renegar, M.D., Tuttle, Oklahoma
- William H. Rhodes, M.D., Enid, Oklahoma
- M. R. Robberson, Sr., M.D., Wynnewood, Oklahoma
- F. W. Rogers, M.D., Carnegie, Oklahoma
- S. C. Rutherford, M.D., Locust Grove, Oklahoma
- A. H. Shi, M.D., Stratford, Oklahoma
- Wm. M. Taylor, M.D., Oklahoma City, Oklahoma
- Will C. Wait, M.D., McAlester, Oklahoma
- R. W. Williams, M.D., Anadarko, Oklahoma

- Muskogee-Sequoiah-Wagoner-McIntosh — (Amalgamation).
- Pontotoc-Murray — (Dissolution).

ASSOCIATE MEMBERSHIP

- The following applications have been received for Associate Membership:
- Lt. Col. Byron A. Nichol, Ft. Sill, Oklahoma
- Robert E. Beddoe, M.D., Shawnee, Oklahoma

THAT MORE MAY KNOW



The Development Fund Campaign of the Oklahoma Medical Research Foundation is still progressing with the final deadline to end the campaign set for May 17.

The results thus far are indicative that the campaign goal of \$2,500,000 will be met. The purpose of the campaign is to secure funds sufficient to operate the Foundation independently for a period of 10 years.

Under the leadership of Mr. W. K. Warren, President of the Warren Petroleum Company of Tulsa, committees are working throughout the state on big gift prospects. In addition, the campaigns in 30 counties of the state are being pushed to a rapid conclusion.

At the beginning of April, the campaign had produced \$946,000.

Research Director

As yet, Foundation officials are not ready to announce the selection of the research director. A nationwide search has been undertaken to find the best qualified medical research scientist possible to direct the broad program of research which will be undertaken by the Research Foundation.

Several promising prospects have been interviewed and Foundation officials feel assured that by this fall the nucleus of the scientific staff will be on hand to begin the work, which has been made possible through the support of over 7,000 citizens and business firms of the state.

Construction Continues

Those who visit the site of the Medical Research Foundation can now get a good idea of what the building will look like. Construction is proceeding on sched-

ule, all outside scaffolding has been removed, and the work of installing partitions and completing the building is well under-way. If the present schedule of operation continues, it is felt that the building can be occupied early this summer.

Thirteenth Street, between the Foundation Building and the University Hospital in Oklahoma City, has been closed to traffic going west for several weeks, while workmen are constructing the tunnel which will connect the hospital and the Foundation building.

It is planned that the tunnel construction will also be completed at the time the Foundation building is ready for occupancy early in the summer.

The tunnel has a twofold purpose. First, it will provide proper access between the University Hospital and the Research Foundation. And secondly, it will serve as a tunnel to carry utilities from the University Hospital power plant to the Foundation Building.

Pledge Report

With the stimulus of the campaign that is now being conducted, the number of pledges and the amount pledged to the Foundation is showing a steady increase. The figures below give the status as of March 15.

Group	No. Pledges	Amount
Doctors of Medicine	690	\$ 818,505.00
Dentists	228	145,263.41
Pharmacists	508	133,732.50
Medical Service Society	1	5,000.00
Nurses	1,236	53,142.25
Technologists	59	5,615.43
General	4,292	1,515,303.51

TOTAL 6,994 \$2,676,562.10

Physicians of Oklahoma will be interested to see that they have now subscribed \$818,505.00 toward their long range goal of \$1,000,000.

CLERK OF THE
COLLEGE OF PHYSICIANS
OF OKLAHOMA

HAVE YOU HEARD?

C. E. Northcutt, M.D., Ponca City, was speaker at the Kiwanis club luncheon in Tonkawa recently. He spoke on socialized medicine.

Wallace Byrd, M.D., has opened private offices in Coalgate. He was formerly associated with the Gill and McBride clinic in Ada.

Felix Adams, M.D., Nowata, discussed socialized medicine at a meeting of the Medical Assistants Society of Washington-Nowata Counties.

C. Doler, M.D., Clinton, headed the Clinton degree team of the Masonic lodge at a recent meeting in Sentinel.

R. L. Meiers, M.D., Sayre, attended a recent medical convention in New Orleans.

C. W. Letcher, M.D., was author of a skit presented in Miami with proceeds used for a park project.

Charles A. Smith, M.D., Oklahoma City, spoke on mental hygiene at a lecture in the auditorium at North-eastern A. and M. College in Miami.

Phillips R. Fife, M.D. and *Elton LeHew, M.D.*, Guthrie, are building a new doctors building.

W. P. Lerblance, M.D., Hartshorne, spoke at a health and safety meeting of the Hartshorne Business and Professional Women's club.

John R. Pollock, M.D., is now associated with Joe Moxley, M.D., Ardmore.

John K. Hart, Associate Executive Secretary of the O.S.M.A., spoke on socialism at a meeting of the Clinton Jaycees.

N. H. Cooper, M.D., Ponca City, traced the progress of medicine at a meeting of the American Association of University Women in Enid.

G. H. Yeary, M.D., Newkirk, is constructing a new office building in that city.

O. G. Bacon, M.D., Frederick, has been appointed acting county superintendent of health of Tillman County.

Paul Fesler, Oklahoma City, has been engaged as consultant for the \$13,000,000 building program of the state of Oklahoma which includes all mental hospitals, tubercular hospitals, and several general hospitals. Mr. Fesler, who is consultant to the Dean of the Medical School in connection with the administration and building of the University and Oklahoma Hospitals, was formerly executive secretary of the O.S.M.A.

M. K. Thompson, M.D. and *J. Hutchings White, M.D.*, Muskogee, and *J. F. Gorrell, M.D.*, Tulsa, attended the New Orleans Graduate Medical Assembly and took the two week tour of the Caribbean visiting hospitals and clinics and observing public health methods in that area.

James M. Bayless, M.D., is now on the staff of the Jones clinic in Seminole.

Joe L. Duer, M.D., Woodward, recently attended a two weeks course in surgical technique at Cook County Graduate School of Medicine and also took a night course at the Chicago Medical Society annual clinic conference.

E. A. McGrew, M.D., Beaver, attended the American Academy of General Practice meeting in St. Louis.

Tom Wainwright, M.D., Mangum, addressed the Kiwanis club of Mangum on the conditions in Oklahoma's mental hospitals.

Walter Cale, M.D., Sapulpa, spoke on inoculation at the South Heights P-TA meeting.

C. E. Cook Jr., M.D., has opened a new clinic in Britton.

Emanuel N. Lubin, M.D., Tulsa, has been awarded a silver key in recognition of his outstanding service to the Jewish Chautauqua society.

Earl M. Woodson, M.D., Poteau, was honored at a surprise birthday dinner recently and twenty-two physicians from western Arkansas and eastern Oklahoma were present.

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1. *Withering, W.*: An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.*: Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. 209: 33-41 (Jan.) 1945.

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WILLIS J. POTTS, M.D., CHICAGO	MALIGNANCIES IN CHILDREN
HERBERT W. SCHMIDT, M.D., ROCHESTER	DIAGNOSIS AND RESPIRATORY TRACT
GRANTLEY W. TAYLOR, M.D., BOSTON	BREAST AND NECK
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MEDICINE IN THE NEWS

"Why Not a Caesarean?" — Kate Holliday — *Readers Digest*, April 1950, page 35. This article explains the growing trend toward the patients wanting Caesarean Sections but it leaves out some of the important reasons such as a more stormy convalescence most of the time than from a normal delivery and also it does not give the fact that the fetal mortality is greater for section deliveries no matter what type. However, this article is fairly good in explaining the reasons for the section in lay language but even they are misleading. About the main reason it gives and this is enlarged upon for not having a Caesarean Section is the fact it might limit the size of the family.

"Beware the 'Scientific' Medical Quacks!" — Norma Lee Browning — *Readers Digest*, April, 1950, page 65. This is a very good exposure of the quackery in medicine not only the cultist but also that occasionally practiced by a rare M.D. However my firm belief is that you can say bad about bad until you are blue in the face and the public will just laugh at you but talk bad about good and the public will gobble it up, enlarge upon it and then drag all of it through the sewers and feel they have done a wonderful job of up-lifting.

"Gout" — Maxine Davis — *Good Housekeeping*, April, 1950, page 13. Woe be unto any man who has a painful joint the night or so after a big party because the good wife will have read this article and poor hubby will be suffering from Captain Katzenjammer's immortal gout. The man would not have a "come-back" because this article was in a publication most men do not read. Mama will be able to tell poor pa the cause, the diagnosis and even the treatment which will include the following: "No more parties pa, you ain't as young as you used to be." This is a good article but the medical advisor should be ready to answer all questions and give sound up to date advice.

"The Jaundice Plague" — Steven M. Spencer — *The Saturday Evening Post*, March 25, 1950, page 28. Read this very factual and lengthy article on Infectious Hepatitis because it may help make a diagnosis but

mainly to re-learn the long tedious and trying steps in any research project in the field of medicine. The patients who have had this disease will read the complete article and be ready to bombard their physicians with difficult questions. It is very factual and should be read by both physicians and laymen.

"Menace—In the Medical Labs" — Albert Deutsch — *Woman's Home Companion*, April, 1950, page 32. Dr. Karl F. Meyer, professor of pathology at University of California states, "The public would be astounded if the truths about laboratory errors were known. Not only laymen, but many physicians have been putting too much blind faith in the results of laboratory tests, sometimes with fatal consequence." One of the reasons for this is the more and more use of the laboratories by the scientifically trained physician. As one Oklahoma physician stated to a group not long ago — "There isn't any such thing as the art of the practice of medicine any more, it is all scientific and that is as it should be." Then we worry about government causing federal medicine. The subject discussed by Deutsch should be dumped in the laps of laboratory directors and laboratory technicians and called to the attention of the members of the medical profession and not given to the readers of the *Woman's Home Companion* who can do nothing about it. What a good excuse for an anxiety complex.

"Birth Control—In Reverse" — *Redbook*, April, 1950, page 29.

If you can't get pregnant just go to one of the planned parenthood clinics or one of the so-called fertility clinics named in this article and bingo, nine months later, a bouncing baby is delivered! At least that is the picture this essay paints for its readers. According to the scene of this great portrait, only a few qualified men in the country can and will make this examination. However, it is being done almost every day by the physicians in the state of Oklahoma just as good and thorough with the same, if not better, methods than those so highly praised by the author. Consequently, if your patients ask you if you are a fertility specialist, you will know whence it came.

MEET OUR CONTRIBUTORS

L. Chester McHenry, M.D., Oklahoma City, is the author of "Medical Aspects of Speech and Hearing Disorders" in this issue of the Journal. Doctor McHenry was graduated from Harvard Medical School in 1925. He limits his practice to otolaryngology and bronchoesophagology. He has practiced in Oklahoma City since the fall of 1928. A member of the American Laryngological, Rhinological, and Otolological Society; American Bronchoesophagological Society; and American Academy of Ophthalmology and Otolaryngology, he has been certified by the otolaryngology board. Doctor McHenry is speaker of the House of Delegates of the Oklahoma State Medical Association.

T. G. Walls, M.D., F.A.C.S., Oklahoma City, wrote the paper on "Chronic Maxillary Sinusitis" in the May Journal. A graduate of the University of Oklahoma School of Medicine in 1921, he limits his practice to ear, nose and throat. He is a member of the American Academy of Ophthalmology and Otolaryngology and the American E.N.T. Society. He has been certified by that board and is a diplomate of the National board.

J. Albert Key, M.D., B.S., St. Louis, Missouri, a guest speaker at the 1949 annual meeting, has a paper on "Diagnosis and Treatment of Intervertebral Disc Lesions in the Low Back" in this Journal. He was graduated from Johns Hopkins in 1918 and practiced in Baltimore, Maryland, before going to St. Louis. Limiting his practice to orthopedic surgery, he is a member of the American Orthopedic Association, American Academy of Orthopedic Surgery; Central States Orthopedic Association, American Surgery Association; and Southwestern Surgical Association. He has been certified by the Board of Orthopedics.

Charles D. Blassingame, M.D., Ph.D., F.A.C.S., Memphis, Tennessee, who was also a 1949 annual meeting guest speaker, has a paper "Diagnosis and Treatment of Sinus and So-Called Sinus Disease" in this issue. He is a graduate of Vanderbilt University. A fellow of the American Academy of Ophthalmology and Otolaryngology, the American Laryngological Association and other medical organizations, he is a member of the American Board of Otolaryngology and a representative to the Board of Governors of the American College of Surgeons.

Below is a reproduction of the bronze medal presented E. S. Lain, M.D., Oklahoma City. At right is a copy of the certificate and Doctor Lain's picture appears in the lower righthand corner. (Also see Editorial, page 181.)

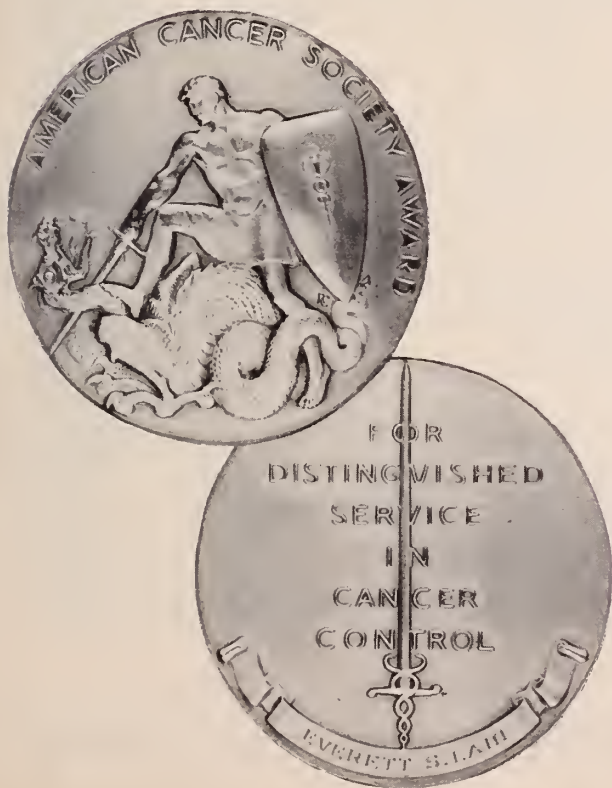


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FOR SALE: One Maelure rectal and proctoscopic table. One proctoscope and one tubal insufflation set. One Admiral surgical cautery with diathermy. One desk and chair. Also obs.-gyn. books. Write Key W., care of the Journal.

For SALE: 110 volt x-ray generator, tube and control. \$125.00. Write Key E, care of the Journal.

FOR SALE: I am retiring after 50 years of activity in surgery and general practice and desire a successor eligible to medical society membership. Office equipment with x-ray, diathermy and excellent laboratory

facilities. Full time nurse-technician employed. Rent reasonable. College town of 25,000 population. Modern standardized hospital and admission to staff easily arranged. A splendid nucleus for a clinic if desired. Terms made agreeable and will remain for introduction. Write Key B, care of the Journal.

FOR SALE: X-ray 25 MA. Profex with upright fluoroscope, cassettes, and darkroom equipment. Used one year. \$1100. Write Key L, care of the Journal.

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FOR SALE: New upright autoclave. In good working order. Other used lab equipment. Write Key M, care of the Journal.

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MEDICAL ABSTRACTS

Robert M. Becker, M.D.

EFFECTS OF DELTA 5 PREGNENOLONE IN RHEUMATOID ARTHRITIS. Davidson, R., Koets, P., Snow, W. G., and Gabrielson, L. G., Depts. Med., Ob. and Gyn., Stanford University School of Medicine, Arch. Int. Med., 85:365, March, 1950.

In a carefully performed and well controlled clinical study, the authors report very encouraging results in most of their rheumatoid arthritis patients following treatment with pregnenolone (a direct oxidation product of cholesterol and intermediate substance in the synthesis of such steroids as progesterone and desoxycorticosterone). Intramuscular injections of pregnenolone were given to 30 patients, made up of 12 with ankylosing spondylitis, 13 with rheumatoid arthritis (peripheral), one with rheumatoid arthritis, ankylosing spondylitis and degenerative joint disease, one with rheumatoid arthritis complicated by glomerulonephritis (may be early disseminated lupus) and one with rheumatoid arthritis with psoriasis. In most all cases response was uniformly favorable within two to three weeks, with disappearance of pain, stiffness and local swelling, redness and tenderness; sed rates, fevers and anemias returned to normal in most cases after longer intervals of treatment. After short periods of treatment, cessation of treatment was quickly followed by return of symptoms, but in longer term treatment over several months, cessation of treatment was not followed by recurrences in a significant number of cases. The most encouraging thing about the report is the complete absence of induced edema, hypertension, hyperglycemia, hirsutism, etc. which so consistently occurs following pituitary ACTH, cortisone, testosterone or desoxycorticosterone therapy.

The authors recommend a dosage schedule of 100 mgm of pregnenolone acetate in oil twice daily over a period of about three to six weeks depending on the clinical response, with maintenance dosage of 50-100 mgm of the same preparation intramuscularly as needed, although they point out further studies will be indicated to determine more accurate dosage schedules. The pregnenolone was supplied by the Schering Corporation. Eighteen cases are reported in detail and reprints should be requested for more careful study of this interesting paper. (Ed. — It would seem advisable at this time to try this relatively simple non toxic method of treatment for rheumatoid arthritis, rheumatic fever and other diffuse vascular or collagen diseases (and possibly acute leukemia) before using other substances like desoxycorticosterone or testosterone with their potential disturbing side reactions.)

FAILURE OF ALPHA TOCOPHEROL (VIT. E) TO INFLUENCE CHEST PAIN IN PATIENTS WITH HEART DISEASE. Rinzler, S. H., Bakst, H., Benjamin, Z. H., Bobb, A. L., and Travell, J., Beth Israel Hosp., N.Y.C., N.Y., Circulation 1:288, February, 1950.

In an accurate "blind test" objective study of 38 patients with angina pectoris treated with 200-300 mgm of alpha tocopherol (Vitamin E) daily by mouth and with placebos, the authors report that the effects of Vitamin E were no different than were the effects of placebos on the chest pain and on objective measurements of cardiac muscle function, thus failing to confirm some less well controlled studies which have reported benefits of alpha tocopherol in cardiac pain.

TREATMENT OF PARALYSIS AGITANS WITH DIHYDRO-BETA-ERYTHROIDINE. Shapiro, S., Baker, A. B., Univ. Minnesota Med. School, Minneapolis, Minn., Am. J. Med., 8:153, February, 1950.

Definite improvement in the rigidity of 24 patients with paralysis agitans following the use of a curare-like compound dihydro-beta-erythroidine is reported by the authors. When used alone it had little effect, but when combined with commonly used atropine derivatives (hyoscine hydrobromide, rabellon, vinobel or bellabulgar) they noted "striking improvement in most cases in which rigidity was a feature." Little or no effect upon the tremor or the oculogyric crises was noted. Recommended treatment schedule: first give one of the atropine derivatives in increasing doses until maximum benefits obtained. Then start dihydro-beta-erythroidine orally in doses of 50 mg. four times daily. They state that definite improvement in symptoms was noticed within a week or two, maximum in one month. They did not state from what pharmaceutical house the drug could be obtained. They state also that the drug is relatively non toxic in doses as high as 300-400 mgm. daily, but occasionally produced mild anorexia, nausea, vomiting and gaseous eructations.

MECHANISMS OF THE AURICULAR ARRHYTHMIAS. Prinzmetal, M., Corday, E., Brill, L., Sellers, A. L., Oblath, R. W., Flieg, W. A., Kruger, H. E., Cedars of Lebanon Hospital, Los Angeles, Calif., Circulation 1:241, February, 1950.

Primarily by the use of high speed motion picture films the authors have observed auricular arrhythmias induced in dogs and report that auricular extrasystoles, auricular paroxysmal tachycardia, auricular flutter and auricular fibrillation are abnormal auricular contractions which have a common origin in an ectopic focus from which the abnormal contractions arise. They differ only in number and intensity of contractions of the auricular musculature. In auricular paroxysmal tachycardia, auricular flutter and auricular fibrillation no circus movement (Lewis) was noted. Instead the impulses and auricular contraction waves spread out from an ectopic focus equally in all directions over the auricles, contracting more slowly in auricular paroxysmal tachycardia, faster in auricular flutter and most rapidly in auricular fibrillation. It is felt that the action of digitalis and quinidine in checking some of the auricular arrhythmias rests in their ability to depress the sensitivity of the A:V node and thus protect it from rapid bombardment by the many auricular excitation waves not that they break up the circus movement as has been previously believed. Confirming observations have been made on man and it seems that Lewis' classic beliefs are now untenable.

THE ERYTHROCYTE SEDIMENTATION RATE IN HUMAN SUBJECTS RECEIVING DICUMAROL. Hyman, J., and Harris, R., Michael Reese Hospital, Chicago, Ill., Am. Heart Jour., 39:321, March, 1950.

The authors found that therapeutic doses of Dicumarol (keeping prothrombin times below 30 per cent of normal) in 10 normal human subjects, did not significantly influence the erythrocyte sedimentation rate. This work is confirmatory of other recent studies in normal humans. (Ed.—Patients with coronary occlusion are not normal subjects of course, though it would seem that in this particular situation the findings would be applicable.)

EFFECT OF CHOLINE AS A LIPOTROPIC AGENT IN THE TREATMENT OF HUMAN CORONARY ATHEROSCLEROSIS. Morrison, L. M., and Gonzales, W. F., Div., of Medicine, Los Angeles County General Hosp., Los Angeles, Calif., Proc. Soc. Exp. Biol. and Med., 73:37, January, 1950.

In a three-year study of 230 patients following their first attack of coronary occlusion and myocardial infarction, alternate patients were treated with daily oral choline bicarbonate in doses ranging from 2—32 Gms. daily, "depending on their tolerance for the drug and the degree of hypercholesterolemia present". Of the 115 control patients (not receiving choline) 35 patients, or 30 per cent, had died after three years, death due to recurrent myocardial infarction in 19 cases. Of the 115 choline-treated patients, 14 patients or 12 per cent had died after three years, death due to recurrent myocardial infarction in only six cases.

The authors conclude that the "choline was effective in significantly reducing the mortality rate due to recurrent coronary thrombosis with myocardial infarction . . ."

SIGNIFICANCE OF THE REFERENCE OF ANGINAL PAIN TO THE RIGHT OR LEFT SIDE OF THE BODY.

Wyburn, Mason R., (London, England), Am. Heart Jour., 39:325, March, 1950.

A plausible explanation for right and left sided referred pain from angina pectoris or coronary occlusion, is put forward by the author. He states that on embryological and phylogenetic grounds the left and right sides of the heart are supplied by nerves from the left and right sides of the nervous system respectively, that impulses arising from the interatrial septum, A:V node, left auricle and left ventricle are transmitted by nerve fibers passing into the left posterior nerve roots of the eighth cervical and first four or five dorsal nerve roots, and that impulses arising in the right auricle or ventricle pass into corresponding nerve root structures on the right side. The interventricular septum is a mid-line structure. Greater involvement of the chambers on the left side would account for more frequent occurrence of pain in the left arm than right, but in a patient with dextrocardia or major involvement on the right side, pain may be referred predominately to the right arm or right side of neck and jaw.

RESOLUTION

WHEREAS, the Supreme Master of our destinies has beckoned to one of our colleagues, directing him to lay down his mortal habiliments and cease his earthly labors, and

WHEREAS, by the passing of Dr. Alfred J. Metscher, the entire medical profession, the community at large, and those who have learned to depend on him for advice and counsel have suffered a great loss, and there has been left a place vacant that cannot be filled, not only in the profession, but in the hearts of those who knew him, and

WHEREAS, we, the members of the Garfield-Kingfisher County Medical Society, mourn the loss of our fellow member and desire to convey to the world our appreciation of his great service, therefore

BE IT RESOLVED, that we express to the relatives of Doctor Metscher our sincere sympathy and our desire to share with them this burden of loss, and

BE IT FURTHER RESOLVED, that a copy of these Resolutions be sent to each of the relatives of Doctor Metscher, a copy spread on the records of the Society, a copy sent to the Journal of the Oklahoma State Medical Association and a copy to the local press of this city.

/s/ P. W. HOPKINS, M.D.

A. F. DOUGAN, M.D.

HERBERT B. SHIELDS, Jr., M.D.
Committee on Resolutions.

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PRODUCERS CREAMERY CO., SPRINGFIELD, MO.

Second Annual Meeting
OKLAHOMA RHEUMATISM SOCIETY
OKLAHOMA CITY, OKLAHOMA
June 4, 1950

8:30 A.M.	REGISTRATION — \$1.00 each	Biltmore Hotel North Lounge*
9:30 A.M.	Business Meeting	(members only)
10:00 A.M.	The Chemistry of Anti-rheumatic Steroids	Mark R. Everett, Ph.D.
	Biochemistry, Oklahoma City, Oklahoma	
10:30 A.M.	The Physiology of Anti-rheumatic Steroids	Arthur A. Hellbaum, Ph.D.
	Biochemistry and Pharmacology, Oklahoma City, Oklahoma	
11:00 A.M.	Experiences with Steroid Therapy	J. N. Owens, Jr., M.D.
	Pathology, Oklahoma City, Oklahoma	
11:30 A.M.	Clinical and Metabolic Effects of ACTH (Adrenocorticotrophic hormone) and Cortisone in Rheumatoid Arthritis	W. Paul Holbrook, M.D., Guest Speaker
	President, The Arthritis and Rheumatism Foundation, Senior Medical Consultant to the Tucson Medical Center and St. Mary's Hospital and Sanitorium, Tucson, Arizona	
12:15—		
2:00 P.M.	Luncheon — Questions by members and friends; answers by essayists.	
2:00 P.M.	Recent Orthopaedic Developments in Arthritis	J. R. Stacy, M.D.
	Orthopaedic Surgery, Oklahoma City, Oklahoma	
2:30 P.M.	Physical Medicine in the Treatment of Arthritis	Sumner Y. Andelman, M.D.
	Internal Medicine, Tulsa, Oklahoma	
3:00 P.M.	Subject to be Announced	E. Goldfain, M.D.
	Internal Medicine, Oklahoma City, Oklahoma	
3:00—		
4:00 P.M.	Armchair Discussion	

*Place of meetings posted here.

ALL O.S.M.A. MEMBERS ARE INVITED TO ATTEND

O.S.M.A. ANNUAL MEETING

HOTEL RESERVATION

Clip and Mail to Oklahoma State Medical Association
Reservations Committee
210 Plaza Court Oklahoma City 3, Oklahoma

Arrival date (day and approximate hour) _____

Length of stay 10

Accompanied by wife Yes No.

Type of accomodation desired Single Room Double Room.

.....Double room with twin beds.Suite. (Check one).

Hotel preference (give first and second choice).

Name _____, M.D.
(Please type or print name)

Town

RESERVATION WILL BE CONFIRMED BY HOTEL,
NOT THE EXECUTIVE OFFICE.



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PROGRAM

FIFTY-SEVENTH ANNUAL SESSION

OKLAHOMA CITY---JUNE 5, 6, AND 7, 1950

GREETINGS FROM THE OKLAHOMA COUNTY MEDICAL SOCIETY

The Oklahoma County Medical Society is happy again to act as host at the 57th Annual Meeting of the Oklahoma State Medical Association. We are hopeful that all of our friends in the State will attend this excellent meeting.

The Annual Meeting of the Alumni Association of the University of Oklahoma School of Medicine will be held on Sunday and it is hoped that all members of the State Medical Association can be present at the Fellowship Hour.

The use of the Municipal Auditorium as a meeting place for the first time this year should add a great deal to the success of the meeting. Again we wish to urge everyone to come to Oklahoma City this year.

Sincerely yours,

JOHN F. KUHN, M.D., President

Oklahoma County Medical Society

ANNUAL MEETING COMMITTEES - 1950

ANNUAL SESSION COMMITTEE: George H. Garrison, M.D., Oklahoma City, Chairman; Ralph A. McGill, M.D., Tulsa; Lewis J. Moorman, M.D., Oklahoma City.

SCIENTIFIC WORK COMMITTEE: Henry G. Bennett, Jr., M.D., Oklahoma City, Chairman; W. W. Sanger, M.D., Oklahoma City; J. M. Parrish, Jr., M.D., Oklahoma City; Homer A. Ruprecht, M.D., Tulsa; Edwin Fair, M.D., Oklahoma City.

GENERAL CONVENTION CHAIRMAN: L. J. Starry, M.D., Oklahoma City.

ENTERTAINMENT COMMITTEE: Tom Points, M.D., Oklahoma City, Chairman; W. C. McClure, M.D., Oklahoma City; L. J. Starry, M.D., Oklahoma City.

COMMERCIAL EXHIBIT COMMITTEE: Leo Cailey, M.D., Chairman, Oklahoma City; Milton J. Serwer, M.D., Oklahoma City.

HOTELS AND REGISTRATION COMMITTEE: Lou Charney, M.D., Oklahoma City; R. Q. Goodwin, M.D., Oklahoma City; C. C. Fulton, M.D., Oklahoma City; P. D. Casper, M.D., Oklahoma City.

GENERAL INFORMATION

HEADQUARTERS

Municipal Auditorium — Oklahoma City, Oklahoma

No hotel will be designated as meeting headquarters.

ROOM RESRATON

Adequate housing facilities have been arranged at the leading hotels of Oklahoma City for all delegates, members, and visitors. All convention reservations should be made through the Reservations Committee, Oklahoma State Medical Association, 210 Plaza Court, Oklahoma City 3, Oklahoma. It is suggested that these reservations be made as soon as possible. A written confirmation will be received directly from the hotel at an early date.

In requesting reservations, please state date of arrival, length of stay, type of accomodation desired, and approximate time of registration. Rooms will not be held after 7:00 P.M. except by prior arrangement.

REGISTTRATION

Zebra Room (basement) Municipal Auditorium

Registration will be held in the Zebra Room, which is downstairs, in the Municipal Auditorium from 8:00 A.M. till 5:00 P.M. Monday through Wednesday, June 5, 6 and 7. All physicians except those from outside the State, visiting guests, and those of intern and military status, must present membership cards for 1950 before registering. Dues for 1950 will not be accepted at the Registration Desk except from County Secretaries.

HOUSE OF DELEGATES REGISTRATION

On Sunday, June 4, registration for members of the House of Delegates will be at the entrance of the Hall of Mirrors, second floor of the Municipal Auditorium from 1:00 P.M. to 4:00 P.M. The House of Delegates will meet at 2:00 P.M. Sunday, June 4, the day preceding the opening of the Scientific Program. The first session will adjourn approximately at 5:30 P.M. and reconvene at 7:00 P.M. All sessions of the House of Delegates will be held in the Hall of Mirrors, Municipal Auditorium, second floor.

GENERAL SESSIONS

The General Sessions will be from 9:00 A.M. to 12:00 Noon and 1:30 P.M. to 4:30 P.M. on Monday and Tuesday; and from 9:00 A.M. to 5:00 P.M. on Wednesday. The General Session Wednesday Afternoon will include the Poliomyelitis Television Broadcast from 1:30 to 2:30 and the Surgical Clinical Pathological Conference at 4:00 o'clock. All General Sessions will be held in the Zebra Room (downstairs) of the Municipal Auditorium.

SECTION MEETINGS

The Section Meetings will be from 1:30 P.M. to 5:00 P.M. on Monday and Tuesday; and on Wednesday from 9:00 A.M. to 12:00 Noon. The Section Meetings will be held in the Zebra Room of the Municipal Auditorium.

TELEVISION AND MOVIES

Schedule for television and movies to be shown in the Zebra Room of the Municipal Auditorium is as follows:

Medicine — 9:00 A. M. to 12:00 Noon — Monday

Surgery — 9:00 A. M. to 12:00 Noon — Tuesday

Medicine — 2:30 P.M. — Wednesday

Public Television Broadcast on Poliomyelitis—1:30 P.M. to 2:30 P.M.—Wednesday

SCIENTIFIC EXHIBITS

Scientific Exhibits have been provided for the first time in many years. They will be located in the area adjoining the Registration Desk. An outstanding selection has been made and all are urged to visit them during the meeting. Scientific Exhibits will be open from 8:30 A.M. to 5:00 P.M.

COMMERCIAL EXHIBITS

Commercial Exhibits will be located in the Zebra Room (basement) of the Municipal Auditorium. All visitors are urged to inspect the great variety of exhibits which will be displayed from 8:30 A.M. to 5:00 P.M.

COUNCIL

The Council will meet at 10:00 A.M. on Sunday, June 4, in the East Room, Biltmore Hotel, and subsequently upon call by the President.

PRESIDENT'S ANNUAL DINNER DANCE

The President's Annual Dinner Dance will be held on Tuesday, June 6, at 8:00 P.M. in the Persian Room of the Skirvin Tower Hotel. Dancing will begin at 10:00 P.M. and continue through 1:00 A.M. Tickets may be purchased at the Registration Desk in the Zebra Room of the Municipal Auditorium.

ROUNDTABLE LUNCHEONS

Medical and Surgical Roundtable Luncheons will be held daily Monday through Wednesday, June 5-7, at 12:00 noon with guest speakers participating. Tickets should be purchased at the Registration Desk, Zebra Room, Municipal Auditorium.

OFFICERS OF OKLAHOMA STATE MEDICAL ASSOCIATION



George H. Garrison, M.D.
Oklahoma City
President



L. Chester McHenry, M.D.
Oklahoma City
Speaker of the House of Delegates



Lewis J. Moorman, M.D.
Oklahoma City
Secretary-Treasurer

YOUR CONVENTION AT A GLANCE

SUNDAY, JUNE 4, 1950

- 10:00 A.M.—Council Meeting, East Room, Biltmore Hotel
 2:00 P.M.—House of Delegates, Hall of Mirrors, Municipal Auditorium
 7:00 P.M.—House of Delegates, Hall of Mirrors, Municipal Auditorium
 5:30 P.M.—O. U. Alumni Fellowship Hour, Persian Room, Skirvin Tower Hotel

MONDAY, JUNE 5, 1950

- 8:00 A.M.—General Registration opens, Zebra Room (basement) Municipal Auditorium
 9:00 A.M.—General Sessions, Zebra Room, Municipal Auditorium
 12:00 Noon—Roundtable Luncheons
 1:30 P.M.—Section Meetings, Zebra Room, Municipal Auditorium
 1:30 P.M.—General Sessions, Zebra Room, Municipal Auditorium

TUESDAY, JUNE 6, 1950

- 8:00 A.M.—Registration, Zebra Room (basement) Municipal Auditorium
 9:00 A.M.—General Sessions, Zebra Room, Municipal Auditorium
 12:00 Noon—Roundtable Luncheons
 1:30 P.M.—Section Meetings, Zebra Room, Municipal Auditorium
 1:30 P.M.—General Sessions, Zebra Room, Municipal Auditorium
 8:00 P.M.—President's Annual Dinner Dance, Persian Room, Skirvin Tower Hotel
 10:00 P.M.—Dancing, Persian Room, Skirvin Tower Hotel

WEDNESDAY, JUNE 7, 1950

- 8:00 A.M.—Registration, Zebra Room (basement) Municipal Auditorium
 9:00 A.M.—Section Meetings, Zebra Room, Municipal Auditorium
 12:00 Noon—Roundtable Luncheons
 1:30 P.M.—General Sessions, Zebra Room, Municipal Auditorium
 5:00 P.M.—Convention closes.

SUNDAY, JUNE 4, 1950

ANNUAL MEETING OF THE ALUMNI ASSOCIATION OF THE UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

SKIRVIN TOWER HOTEL, PERSIAN ROOM, OKLAHOMA CITY, OKLA.

ROBERT B. GIBSON, PRESIDENT, PRESIDING

- 5:30 P.M. Reunion and Fellowship Hour — Refreshments
 (For all doctors and wives attending the Oklahoma State Medical Association Annual Meeting) — The official 10 year class reunions will meet here also as follows:

- Class of 1910 — Chairman, Eva Wells, M.D., Med. Arts Building, Oklahoma City
 Class of 1920 — Chairman, Carl Brundage, M.D., 1200 No. Walker, Oklahoma City
 Class of 1930 — Chairman, Bert Mulvey, M.D., 1200 No. Walker, Oklahoma City
 Class of 1940 — Chairman, W. T. McCollum, M.D., 415 N. W. 12th, Oklahoma City
 Class of 1950 — Chairman, Robert Hargrove, M.D., Medical School, Oklahoma City

- 6:30 P.M. (1) Same place — Persian Room, Skirvin Tower Hotel. All doctors and wives invited — the seniors will be given the Hippocratic Oath Sponsio Academica by Robert B. Gibson, M.D., Ponca City, Oklahoma

- (2) Welcome — by Mark R. Everett, Ph.D., Dean

- (3) Honoring of Professors Emeritus:
 George A. LaMotte, M.D., Medicine
 by Phil McNeil, M.D.
 C. J. Fishman, M.D., Medicine
 by R. Q. Goodwin, M.D.

- (4) The Oklahoma Medical Research Foundation Report, J. G. Puterbaugh, President, McAlester, Oklahoma.

- (5) Election of Officers.

GUEST SPEAKERS



KENNETH APPEL, M.D., Philadelphia, Pennsylvania. PSYCHIATRY. Consultant in Psychiatry University of Pennsylvania Hospital; Associate Psychiatrist, University of Pennsylvania Hospital; Professor of Clinical Psychiatry, University of Pennsylvania Hospital; Associate of the College of Physicians; Association for Research in Nervous and Mental Diseases; American Psychiatric Association; American Board of Psychiatry and Neurology.



JOHN S. BOUSLOG, M.D., Denver, Colorado. RADIOLOGY. Associate Clinical Professor of Radiology, University of Colorado School of Medicine. Civilian Consultant in Radiology, Fitzsimons General Hospital. Fellow American College of Radiology (Chancellor); Fellow, American College of Chest Physicians. President-Elect Radiological Society of North America; American Roentgen Ray Society; American Radium Society.



JOSEPH W. GALE, M.D., Madison, Wisconsin. GENERAL SURGERY. Professor of Surgery University of Wisconsin Medical School; Head of Section of Thoracic Surgery State of Wisconsin General Hospital. Member, American Association for Thoracic Surgery; American Surgical Association; Central Surgery Association; Western Surgical Association; Fellow, American College of Surgeons.

GUEST SPEAKERS



EDGAR HULL, M.D., New Orleans, Louisiana. GENERAL MEDICINE. Professor of Medicine and Head of the Department, Louisiana State University School of Medicine; Senior Visiting Physician, Charity Hospital; Visiting Physician and Director of Heart Station, Mercy Hospital and Hotel Dieu. Member of American Board of Internal Medicine. Fellow, American College of Physicians and Governor for Louisiana. Honorary Member, Southern Society for Clinical Research. Markle Fellowship for study of tropical diseases, Costa Rica and Guatemala (one month) 1944.



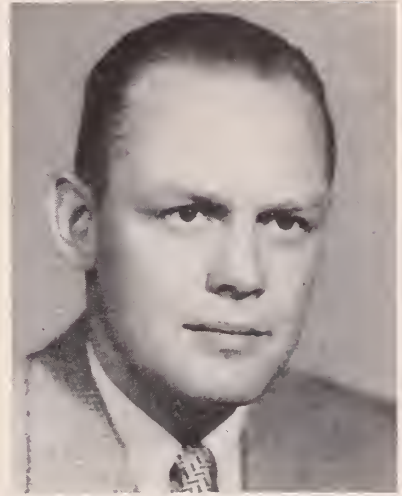
ROBERT R. KIERLAND, M.D., Rochester, Minnesota. DERMATOLOGY AND SYPHILIGOLOGY. Assistant Professor, Dermatology and Syphilology, University of Minnesota Graduate School (Mayo Foundation) Rochester. Consulting physician, Section of Dermatology and Syphilology, Mayo Clinic. Member of American Medical Association; American Academy of Dermatology and Syphilology; Society of Investigative Dermatology and American Dermatological Association. President of the Minnesota State Dermatological Society. Special Consultant to the United States Public Health Service and the Veterans Administration.



JOHN S. KNIGHT, M.D., Kansas City, Missouri. OTOLARYNGOLOGY AND BRONCHIO-ESOPHAGOLOGY. Associate, University of Kansas School of Medicine; Consultant in Otolaryngology, University of Missouri School of Medicine; Director and Chief, Otolaryngology Service, Kansas City Municipal Hospital; Missouri-Kansas Area Consultant, U. S. Veteran's Bureau. American Academy of Ophthalmology and Otolaryngology; American Broncho esophagological Association; American College of Chest Physicians.

GUEST SPEAKERS

ALBERT N. LEMOINE, M.D., Kansas City, Missouri. EYE. Chairman of the Department of Ophthalmology, University of Kansas Medical Center. Member American Academy of Ophthalmology and Otolaryngology; American Ophthalmological Society; Association for Research in Ophthalmology; Diplomat, American Board of Ophthalmology.



VINCENT J. O'CONOR, M.D., Chicago, Illinois. UROLOGY. Professor and Head of Department of Urology at Northwestern University Medical School, Chicago. Chief of Urological Service Wesley Memorial Hospital, Chicago. American Association of Genito-Urinary Surgeons; American Urological Association; International Society of Urology; Fellow, American College of Surgeons.



HARRY SHWACHMAN, M.D., Boston, Massachusetts. PEDIATRICS. Head of the Division of Clinical Laboratory at Children's Hospital; Chief of Nutrition Clinic, Children's Hospital. Associate Professor of Pediatrics Harvard Medical School. Member American Board of Pediatrics.



GUEST SPEAKERS



ATTILA THOMAS, M.D., Denver, Colorado. ORTHOPEDICS. Associate Clinical Professor of Orthopedic Surgery at the University of Colorado Medical School; Attending Orthopedic Surgeon Children's Hospital, Mercy Hospital, and Fitzsimons General Hospital of the U. S. Army in Denver. Diplomate of the National Board of Medical Examiners and of the American Board of Orthopedic Surgeons. Fellow of the American College of Surgeons. Orthopedic Consultant and Chief of Prosthetic Clinic, Veteran's Administration, Denver.



CURTIS TYRONE, M.D., New Orleans, Louisiana. GYNECOLOGY AND OBSTETRICS. Professor of Clinical Gynecology, Tulane University School of Medicine; Chief of Gynecology, Touro Infirmary, New Orleans; Head of the Department of Obstetrics and Gynecology, Ochsner Clinic, New Orleans. American Surgical Association; Southern Surgical Association; Fellow, American College of Surgeons.

SCIENTIFIC PROGRAM

MONDAY, JUNE 5, 1950

SURGICAL GUEST SPEAKERS

- 9:00 Joe Gale, M.D.
"The Crippled Lung"
- 9:45 Albert Lemoine, M.D.
"Differential Diagnosis of a Red Eye"
- 10:30 Vincent O'Connor, M.D.
"Rupture of the Urethra and Bladder — Etiology, Diagnosis and Treatment"
- 11:15 Curtis Tyrone, M.D.
"Endometriosis, A Clinical Problem of Increasing Importance"

12:00 Roundtable Luncheon
Medicine

MEDICAL SECTION

9:00 to 10:30 Medical Television

10:30 to 12:00 Medical Movies

Roundtable Luncheon
Surgery

MEDICAL GUEST SPEAKERS

- 1:30 Kenneth Appel, M.D.
"Gastro-Intestinal Function and Emotion"
- 2:15 Harry Shwachman, M.D.
"The Use of New Antibiotics in Infancy and Childhood"
- 3:00 John S. Bouslog, M.D.
"Some Misconceptions of the Gastro-Intestinal Tract in Children"
- 3:45 Edgar Hull, M.D.
"Pitfalls in the Use of Precision Methods in Cardiac Diagnosis"

SURGICAL SECTION

- 1:30 E. Norris Robertson, M.D.
"Goniotomy in Congenital Glaucoma"
- 1:45 C. A. Royer, M.D.
"Indications for and Results of Keratoplasty"
- 2:00 Guest Discussant—Albert N. Lemoine, M.D.
- 2:15 Francis M. Duffy, M.D.
"A Study and Investigation of the Etiology and Treatment of Peptic Ulcer"
- 2:30 Vance A Bradford, M.D.
"Recent Trends in Biliary Tract Surgery"
- 2:45 Ed Fair, M.D.
"Traumatic Injuries to the Chest"
- 3:00 Guest Discussant—Joe Gale, M.D.
- 3:30 B. C. Chatham, M.D.
"Geriatric Gynecology"
- 3:45 Herbert S. Orr, M.D.
"A Preliminary Report — The Use of Hydrochloric Acid and Glutamic Hydrochloride for Vomiting in Pregnancy"
- 4:00 Guest Discussant—Curtis Tyrone, M.D.
- 4:15 Henry S. Browne, M.D.
"The Conservative Management of Hydronephrosis"
- 4:30 Jesse Miller, M.D.
"Renal Calculi"
- 4:45 Guest Discussant—Vincent O'Connor, M.D.

TUESDAY, JUNE 6, 1950

MEDICAL GUEST SPEAKERS

- 9:00 Robert Kierland, M.D.
"Treatment of the More Common Skin Diseases"
- 9:45 John S. Bouslog, M.D.
"Some Pitfalls in the Diagnosis and Treatment of Cancer of the Cervix"
- 10:30 Kenneth Appel, M.D.
"Character Formation and Modification"
- 11:15 Edgar Hull, M.D.
"Clinical Use of Quinidine"

12:00 Roundtable Luncheon
Medicine

SURGICAL SECTION

- 9:00 to 10:30 Surgical Television
- 10:30 to 12:00 Surgical Movies

Roundtable Luncheon
Surgery

SURGICAL GUEST SPEAKERS

- 1:30 John S. Knight, M.D.
"Hoarseness: Illustrations and Voice Recordings of Various Laryngeal Diseases"
- 2:15 Atha Thomas, M.D.
"Amputation — Surgical Principles and After Care With Special Attention to Prosthetic Requirements"
- 3:00 Vincent O'Connor, M.D.
"Conservative Surgery of the Hydro-nephrotic Kidney; Operations and End Results"
- 3:45 Joe Gale, M.D.
"Carcinoma of the Lung"

MEDICAL SECTION

- 1:30 W. G. McCreight, M.D. •
"Cutaneous Parasites"
- 1:45 C. P. Bondurant, M.D.
"Tumors of the Skin"
- 2:00 Guest Discussant—Robert Kierland, M.D.
- 2:15 J. Neil Lysaught, M.D.
"Cardio Esophogial Relaxation in the Newborn"
- 2:30 Arthur W. Hoyt, M.D.
"Rooming In: Experience in a Small Hospital"
- 2:45 Guest Discussant—Harry Schwachman, M.D.
- 3:15 William N. Weaver, M.D.
"Recent Advances in the Treatment of Cerebral Thrombosis"
- 3:30 J. William Finch, M.D.
"The Problem of Obesity"
- 3:45 Phil McNeil, M.D.
"Lower Nephron Nephrosis"
- 4:00 Guest Discussant—Edgar Hull, M.D.
- 4:15 E. D. Greenberger, M.D.
"Outside Looking In — Acute Abdomen"
- 4:30 C. J. Cavanaugh, M.D.
"Newer Methods of Cholecystography"
- 4:45 Guest Discussant—John S. Bouslog, M.D.

WEDNESDAY, JUNE 7, 1950

SURGICAL GUEST SPEAKERS

- 9:00 Albert N. Lemoine, M.D.
"Early Treatment of the Cross Eyed Child"
- 9:45 John S. Knight, M.D.
"What the Family Medical Adviser Should Know About Fenestration"

MEDICAL GUEST SPEAKERS

- 10:30 Harry Shwachman, M.D.
"The Celiac Syndrome and Pancreatic Insufficiency"
- 11:15 Robert Kierland, M.D.
"Cutaneous Manifestations of Systemic Disease"

12:00 Roundtable Luncheon
Medical

1:30—2:30 Television, General Broadcast
(Polio)

Surgical Guest Speakers

- 2:30 Atha Thomas, M.D.
"Fractures About the Elbow in Children"
- 3:15 Curtis Tyrone, M.D.
"Current Misconceptions in Conservative Pelvic Surgery"

4:00 to 5:00 Clinical Pathological
Conference (Surgical)

GENERAL SECTION

- 9:00 Joe Tyler, M.D.
"Goals in Psychotherapy"
- 9:15 James Snyder, M.D.
"The Physician-Patient Relationship"
- 9:30 Guest Discussant—Kenneth Appel, M.D.
- 10:00 William Waldrop, M.D.
"Conservative Management of Low Back Pain"
- 10:15 C. S. Graybill, M.D.
"Differential Diagnosis of the Hip in Children"
- 10:30 Guest Discussant—Atha Thomas, M.D.
- 11:00 Byron W. Aycock, M.D.
"Otitis Externa"
- 11:15 R. L. Stuart, M.D.
"Deep Infections of the Neck"
- 11:30 Guest Discussant—John S. Knight, M.D.

Roundtable Luncheon
Surgical

MEDICAL SECTION

2:30 Medical Movies

WOMAN'S AUXILIARY

OKLAHOMA STATE MEDICAL ASSOCIATION

CONVENTION PROGRAM

June 4, 5, 6 and 7, 1950

Skirvin Hotel



Mrs. James F. McMurry
Sentinel
President Elect



Mrs. Clinton Gallaher
Shawnee
President

SUNDAY, JUNE 4, 1950

6:00 P.M. Executive Board Meeting (the elected officers, council women, A.M.A. Delegate) Home of Mrs. F. Redding Hood, Oklahoma City.

MONDAY, JUNE 5, 1950

9:00 A.M. Registration, Mezzanine Skirvin Hotel. All members and visiting physicians wives are welcome.

10:00 A.M. General Meeting, Skirvin Hotel, 14th. Floor. Mrs. Clinton Gallaher, presiding
Invocation, Mrs. McLain Rogers, Clinton
Pledge of loyalty to the American Medical Association
Greetings, Mrs. Onis Hazel, President of Oklahoma County Auxiliary
Response, Mrs. Marvin Elkins, Muskogee, Oklahoma
Introduction of guests
Roll Call, Mrs. Charles Paramore, Shawnee, Recording Secretary
Reading of the Minutes
Announcements, Mrs. F. Redding Hood, Convention Chairman
Memorial Service, Mrs. James Stevenson, Tulsa, Oklahoma
Greetings, George H. Garrison, M.D., President, Oklahoma State Medical Association
Reports:
Officers, elected and appointed
Standing Committee Chairmen
Special Committee Chairmen
Credentials, Mrs. Milam McKinney, Oklahoma City

12:30 P.M. Buffet lunch for past presidents, home of Mrs. Neil Woodward, 4302 Lincoln Blvd., Oklahoma City

TUESDAY, JUNE 6, 1950

10:00 A.M. General Meeting, Mrs. Clinton Gallaher, presiding, Skirvin Hotel, 14th floor
Invocation, Mrs. F. L. Patterson, Sr., Duncan
Report of Delegates:
National Convention, Mrs. Neil Woodward, Oklahoma City
Southern Convention, Cincinnati, Ohio, Mrs. Ray M. Balyeat, Oklahoma City
Fall Conference, Chicago, Illinois, Mrs. James F. McMurry, Sentinel
Announcements, Mrs. F. Redding Hood, Convention Chairman
Report of Auditing Committee
Greetings, Ralph McGill, M.D., Tulsa, President-Elect, Oklahoma State Medical Association
Old Business
New Business
Report of Nominating Committee, Mrs. James McMurry, President-Elect
Election of Officers
Election of Delegates to National, June 26-30, San Francisco
Installation of Officers, Mrs. Neil Woodward
Adjournment

12:30 P.M. Luncheon, Persian Room, Skirvin Hotel (Tower), Mrs. Onis Hazel, Oklahoma City, presiding
Invocation, Mrs. Marvin Glissman, Oklahoma City
Introduction of Guests
Short Resumé of 25 Years of Auxiliary, Mrs. E. P. Allen, Oklahoma City
Honorary and Life Membership Certificates Presented
Charters presented to each County Auxiliary, received by County Auxiliary President, Mrs. Joseph Kelso, Vice-President
Introduction of retiring State Officers, Mrs. Clinton Gallaher, Shawnee
Balliet's Summer Style Review

8:00 P.M. President's Annual Inaugural Dinner Dance

WEDNESDAY, JUNE 7, 1950

9:00 A.M. Post Convention Board Meeting, Breakfast, Biltmore Hotel, Mirror Room (includes all State Officers, Chairmen of Committees, Council Women, County Presidents and Presidents-Elect) Mrs. James McMurry, presiding

TECHNICAL EXHIBITS

The following companies will exhibit at the 57th Annual Meeting. Plans have been made for well arranged, interesting booths. Make it a point to visit the technical exhibits to see what the companies are offering the medical profession.

<i>Booth No.</i>	<i>Firm</i>	<i>Location</i>
1	G. D. Searle and Company	Chicago, Illinois
2	Connie's Prescription Shop	Oklahoma City, Okla.
3	Smith-Dorsey Company	Lincoln, Nebraska
4	The Ediphone Company	Oklahoma City, Okla.
5 & Cor. A	Mid-Continent Surgical Supply Company & Merkel X-Ray Corporation	Tulsa, Oklahoma
6	A. H. Robins Company	Richmond, Virginia
7	Winthrop-Stearns, Incorporated	New York, N. Y.
8	Philip Morris Tobacco Company	New York, N. Y.
9	Carnation Milk Company	Los Angeles, Calif.
10 & Cor. B	Sealy Mattress Company	Memphis, Tennessee
11	Roach Drug Company	Oklahoma City, Okla.
12	H. G. Fischer & Company	Franklin Park, Illinois
13	A. S. Aloe Company	St. Louis, Missouri
14	Coca Cola Bottling Company	Atlanta, Georgia
15	Mead Johnson and Company	Evansville, Indiana
16	Producer's Creamery Company	Springfield, Missouri
17	Dictaphone Corporation	Oklahoma City, Okla.
18	S. H. Camp and Company	Jackson, Michigan
19	Beltone Hearing Service	St. Paul, Minnesota
20 & Cor. C	General Electric X-Ray Corporation	Milwaukee, Wisconsin
21	Holland-Rantos Company, Incorporated	New York, N. Y.
22	The Stuart Company	Pasadena, California
23	Wyeth, Incorporated	Philadelphia, Penn.
24	Hoffman-La Roche, Incorporated	Nutley, New Jersey
25	W. C. Scott and Company	Kansas City, Missouri
26	Cameron Heartometer Company	Chicago, Illinois
27	Schering Corporation	Bloomfield, New Jersey
28	Parke, Davis and Company	Detroit, Michigan
29	Ciba Pharmaceutical Products, Inc.	Summit, New Jersey
30	United Medical Equipment Company	Kansas City, Missouri
31	Ortho Pharmaceutical Corporation	Raritan, New Jersey
32	C. V. Mosby Company	St. Louis, Missouri
33	Eli Lilly and Company	Indianapolis, Indiana
34	Lantene Company	Chicago, Illinois
35	E. R. Squibb and Sons	New York, N. Y.
36	Physicians Sales and Service	Oklahoma City, Okla.
37	Doho Chemical Corporation	New York, N. Y.
38	J. B. Lippincott Company	Philadelphia, Penn.
39 and 40	Caviness-Melton Supply Company	Oklahoma City, Okla.
41	J. A. Majors and Company	New Orleans, La.
42	M. & R. Dietetic Laboratories	Columbus, Ohio
43	Warren-Teed Products Company	Columbus, Ohio
44	Tri-State Pharmaceutical Company	Oklahoma City, Okla.
45	Mid-West Surgical Supply Company	Wichita, Kansas
46	Lederle Laboratories Division	Dallas, Texas
47	Credit Service	Oklahoma City, Okla.

DELEGATES AND ALTERNATES

<i>County Society</i>	<i>DELEGATES</i>	<i>ALTERNATES</i>
Alfalfa.....	L. R. Kirby, M.D., Cherokee	Forrest H. Hale, M.D., Cherokee
Atoka-Bryan-Coal-Beckham.....		
Johnson.....	O. C. Standifer, M.D., Elk City	Phil J. Devanney, M.D., Sayre
Blaine.....	C. L. Rogers, M.D., Canton	W. F. Bohlman, M.D., Watonga
Caddo.....	E. T. Cook, Jr., M.D., Anadarko	C. R. Waterbury, M.D., Apache
Canadian.....	M. E. Phelps, M.D., El Reno	A. L. Johnson, M.D., El Reno
Carter.....	Thornton Kell, M.D., Ardmore	James O. Asher, M.D., Ardmore
	G. E. Johnson, M.D., Ardmore	Odis A. Cook, M.D., Madill
Cherokee.....	H. A. Masters, M.D., Tahlequah	R. K. McIntosh, Jr., M.D., Tahlequah
Choctaw-McCur-tain-Pushmataha.....	H. D. Wolfe, M.D., Hugo	Thomas E. Rhea, M.D., Idabel
	R. H. Sherrill, M.D., Broken Bow	Woodrow Williams, M.D., Idabel
	Robert Head, M.D., Idabel	E. A. Johnson, M.D., Hugo
Cleveland.....	James L. Nicholson, M.D., Norman	James F. Hohl, M.D., Norman
	W. W. Wickham, M.D., Norman	James O. Hood, M.D., Norman
Comanche.....	Fred T. Fox, M.D., Lawton	Byron W. Aycock, M.D., Lawton
Cotton.....		
Craig-Ottawa.....	J. E. Highland, M.D., Miami	M. A. Connell, M.D., Picher
	Felix Adams, M.D., Vinita	D. H. Olson, M.D., Vinita
Creek.....		
Custer.....	McLain Rogers, M.D., Clinton	Ellis Lamb, M.D., Clinton
		J. G. Wood, M.D., Weatherford
Garfield-King-fisher.....	J. Wendell Mercer, M.D., Enid	Julian Feild, Enid
	Byron J. Cordonnier, M.D., Enid	P. W. Hopkins, M.D., Enid
	E. Evans Chambers, M.D., Enid	Mark D. Holcomb, M.D., Enid
	John R. Taylor, M.D., Kingfisher	Frank C. Lattimore, M.D., Kingfisher
Garvin.....	Carl T. Steen, M.D., Pauls Valley	M. E. Robberson, Jr., M.D., Wynne-wood
Grady.....	H. H. Macumber, M.D., Chickasha	R. R. Coates, M.D., Chickasha
Grant.....	Robert W. Choice, M.D., Wakita	F. P. Robinson, M.D., Pond Creek
Greer.....	J. B. Hollis, M.D., Mangum	Tom L. Wainwright, M.D., Mangum
Hughes.....	H. V. Schaff, M.D., Holdenville	Paul Kernek, M.D., Holdenville
Jackson.....	E. W. Mabry, M.D., Altus	E. A. Abernathy, M.D., Altus
Jefferson.....	W. T. Andreskowski, M.D., Ryan	
Kay-Noble.....	Bill Simon, M.D., Perry	R. J. Dougherty, M.D., Perry
	T. C. Glasscock, M.D., Ponca City	N. H. Cooper, M.D., Ponca City
	E. E. Waggoner, M.D., Tonkawa	V. C. Merrifield, M.D., Ponca City
Kiowa-Washita.....		
LeFlore-Haskell.....	W. W. Cotton, M.D., Poteau	F. P. Baker, M.D., Talihina
	K. N. Roberts, M.D., Stigler	W. S. Carson, M.D., Keota
Lincoln.....		
Logan.....	Louis H. Ritzhaupt, M.D., Guthrie	James S. Petty, M.D., Guthrie
McClain.....	W. C. McCurdy, Jr., M.D., Purcell	R. L. Royster, M.D., Purcell
Muskogee-Sequo-yah-Wagoner.....	J. Hutchings White, M.D., Muskogee	R. N. Holcombe, M.D., Muskogee
	George L. Kaiser, M.D., Muskogee	M. K. Thompson, M.D., Muskogee
	William N. Weaver, M.D., Muskogee	Lawrence S. McAlister, M.D., Mus-kogee

DELEGATES AND ALTERNATES

<i>County Society</i>	<i>DELEGATES</i>	<i>ALTERNATES</i>
Northwestern Counties.....	O. C. Newman, M.D., Shattuck Joe L. Duer, M.D., Woodward E. A. McGrew, M.D., Beaver Don McNeal, M.D., Taloga H. Walker, M.D., Buffalo	Floyd Newman, M.D., Shattuck R. G. Obermiller, M.D., Woodward
Okfuskee.....	A. S. Melton, M.D., Okemah	Dayton M. Rose, M.D., Okemah
Oklahoma.....	W. K. Ishmael, M.D., Okla. City Milam F. McKinney, M.D., Okla. City W. W. Rucks, Jr., M.D., Okla. City Howard B. Shorbe, M.D., Okla. City J. B. Snow, M.D., Okla. City Onis G. Hazel, M.D., Okla. City Lee K. Emenhisier, M.D., Okla. City George H. Kimball, M.D., Okla. City Edward M. Farris, M.D., Okla. City Stearley H. Harrison, M.D., Okla. City Allen Gibbs, M.D., Okla. City P. K. Graening, M.D., Okla. City W. E. Strecker, M.D., Okla. City Chester Seba, M.D., Okla. City Ralph A. Smith, M.D., Okla. City Henry G. Bennett, Jr., M.D., Okla. City	H. Thompson Avey, M.D., Okla. City F. Maxey Cooper, M.D., Okla. City E. E. Fair, M.D., Okla. City J. P. Wolff, M.D., Okla. City S. N. Stone, M.D., Okla. City Everett B. Neff, M.D., Okla. City LeRoy H. Sadler, M.D., Okla. City Jess D. Herrmann, M.D., Okla. City Leo F. Cailey, M.D., Okla. City Fenton A. Sanger, M.D., Okla. City Robert B. Howard, M.D., Okla. City Coye McClure, M.D., Okla. City W. T. McCollum, M.D., Okla. City Sanford Matthews, M.D., Okla. City Paul M. Vickers, M.D., Okla. City Vance Bradford, M.D., Okla. City
Okmulgee.....	I. W. Bollinger, M.D., Henryetta Fred Watson, M.D., Okmulgee	C. E. Smith, M.D., Henryetta R. L. Kendall, M.D., Okmulgee
Osage.....		
Payne-Pawnee.....	M. L. Saddoris, M.D., Cleveland P. E. Fry, M.D., Stillwater J. D. Martin, M.D., Cushing	J. H. Rollins, M.D., Pawnee W. H. Garnier, M.D., Stillwater John Martin, M.D., Cushing
Pittsburg.....	C. E. Lively, M.D., McAlester T. H. McCarley, M.D., McAlester	Wm. P. LerBlance, M.D., Hartshorne Floyd T. Bartheld, M.D., McAlester
Pontotoc-Murray.....	William T. Gill, M.D., Ada E. M. Gullatt, M.D., Ada	
Pottawatomie.....	John M. Carson, M.D., Shawnee	C. C. Young, M.D., Shawnee
Rogers-Mayes.....	P. S. Anderson, M.D., Claremore	W. A. Howard, M.D., Chelsea
Seminole.....	Guy B. Vansandt, M.D., Wewoka	Mack Shanholtz, M.D., Wewoka
Stephens.....	E. G. King, M.D., Duncan	W. R. Cheatwood, M.D., Duncan
Texas.....	E. L. Buford, M.D., Guymon	
Tillman.....	George A. Tallant, M.D., Frederick	Roy L. Fisher, M.D., Frederick
Tulsa.....	W. A. Showman, M.D., Tulsa W. A. Dean, M.D., Tulsa A. B. Carney, M.D., Tulsa Charles G. Stuard, M.D., Tulsa John G. Matt, M.D., Tulsa Walter S. Larrabee, M.D., Tulsa Victor K. Allen, M.D., Tulsa W. D. Hoover, M.D., Tulsa Robert E. Funk, M.D., Tulsa Marshall O. Hart, M.D., Tulsa	J. S. Chalmers, M.D., Sand Springs A. Ray Wiley, M.D., Tulsa Franklin D. Sinclair, M.D., Tulsa Donald V. Crane, M.D., Tulsa Thomas J. Hardman, M.D., Tulsa Herbert S. Orr, M.D., Tulsa Maurice J. Searle, M.D., Tulsa Earl M. Lusk, M.D., Tulsa Logan A. Spann, M.D., Tulsa I. H. Nelson, M.D., Tulsa
Washington- Nowata.....	L. B. Word, M.D., Bartlesville F. S. Etter, M.D., Bartlesville S. A. Lang, M.D., Nowata	F. M. Adams, M.D., Nowata H. E. Denyer, M.D., Bartlesville
Woods.....	I. F. Stephenson, M.D., Alva	Rhonald A. Whiteneck, M.D., Way- noka

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*Pitt, C.K.: *The Art and Science of Artificial Infant Feeding*, J.M. Asso. Ala. 19:101 (Oct.) 1949.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

SUMMER CAMP FOR DIABETIC CHILDREN

On page 293 of this issue, the Journal is pleased to carry the announcement of the opening of the first complete summer camp in the south for Diabetic children, operated by the Sweeney Diabetic Foundation of Gainesville, Texas. A moment's reflection brings into clear focus all the implications of such a camp. There is, of course, first the chance for a diabetic child to enjoy all the fun that any other youngster has, and he can have all of this without parental supervision. He can see how other diabetic children act, think and feel, and will for once in his life not be set apart as a queer one, or at least as a special one, but the advantages are not all in favor of the child. This grand vacation for the gosling is no less a vacation for the goose, and perhaps the gander.

All who are caring for diabetic children and who are attracted by the possibilities of such a camp will be interested in the following quotation contained in a letter from Doctor Sweeney relative to the announcement: "That it is a non-profit organization and one from which I get nothing, except headaches and gray hairs. It is the first camp of its kind in the South and it is for the South. The people of this community have only initiated it. Children who can pay will be expected to pay but no child will be turned down who cannot pay."

STATE MEDICINE REACHING LOW LEVELS

As time goes on the *British Medical Journal*, admirably frank in its reporting, becomes increasingly interesting to American readers who stand in mortal fear of the entangling and annulling controls of nationalized medicine.

In spite of the British Medical Association's attempt to make the National Health Service work, the *British Medical Journal* reflects the innumerable problems confronting the Ministry of Health and its inability

to equably solve them to the full satisfaction of both patient and physician. It is interesting to note that the general practitioner, his pay and his patients have presented some of the most difficult problems. Failure to achieve satisfaction in this field suggests that compulsory health insurance in the United States might prove a great disappointment to the Administration bent upon alleged better service and more adequate coverage in the very field which is proving so difficult in Great Britain.

Passing from this one serious observation and making no attempt at comprehensive consideration of Britain's health service problems, attention is called to the evidence of dissatisfaction and unrest as reflected periodically in the supplement to the Journal. We quote briefly from the March 4 issue in order to give two examples of the many complaints appearing under "correspondence". The following is from a letter signed by R. Bain:

"My partner and I have to-day attended over 150 patients during two surgeries, as well as making over 50 visits — no light task in this mainly rural practice. More than a quarter of these attendances were unnecessary.

"When the proposal to impose the 1s. charge on prescriptions was first announced, attendances at the surgery dropped by 50%, due, I am convinced, to the fact that many people were of the opinion that the charge came into operation immediately. Many of my patients, like those of Dr. Duncan, agree that the charge is a desirable thing.

"In previous days the general practitioner's task was to fight disease. Now the main fight is against time. At a recent medical meeting I happened to ask a fellow practitioner if he had read a recent article in the *B. M. J.* He replied that he had not had time to open the Journal for several weeks, and added, 'My only concern these days is how to empty my surgery.' On speaking to several other doctors present it became obvious that tempers are getting short over

this question of unnecessary work.

"In this materialistic age the only way to check this abuse is, I feel, by the imposition of some financial deterrent. I would, however, like to see, as was suggested, the old-age pensioners exempted. Surely, anything that will enable us to attend properly to our really ill patients is most desirable — if not essential."

The following letter from David B. Ramsay, reaching the botton of the low level:

"Sir,—All of us during and since the war have met with unusual requests by patients, but the following, I feel, must rank as almost unique.

"During the past week one of my partners and myself have received separate requests from two female patients employed by a local factory for certificates stating that they might be allowed to go to the toilet during working hours. They said this had been demanded by their forewoman.

"The request did not surprise us in the least—no request ever does nowadays. What did amaze us, however, was that one of the girls stated that a friend of hers had already been granted such a certificate by her doctor. Has medicine really sunk so low?—I am, etc.,"

ANEURIN BEVAN'S AGUE

It is said that the Minister of Health was suffering from a chill and was unable to appear at a Buckingham Palace state dinner and was detained from routine duties at his office. No doubt the recent revelation of the truth about the cost of Britain's so-called health program and the needed supplementary appropriations necessary to liquidate the unexpected costs representing the difference between the estimated and the actual expenditures under the health act had something to do with the chills and fever.

The definition of malaria admirably fits the situation. *Mala*, bad, and *aria*, air. Truly the medical atmosphere under Bevan's regime in Great Britain is bad. Unfortunately, he is in for the remittent type of fever in which the hot stage, though exhibiting a tendency toward remission, never allows the surcease of an intermission. The heat will be poured on continuocely with at least periodic chills and sweats which are devastating.

Mr. Bevan insisted upon the miasma, now he must make the best of it. Mr. Truman and Mr. Ewing are in for chills and fever if they do not pitch their policies on a higher plane.

GENERAL PRACTICE

The first number of the first volume of the official publication of the American Academy of General Practice has appeared in a most attractive format. An artistic arrangement of the letters G. P. represent the Journal's title. The departments, their titles and arrangement inspire a sustained reader interest.

As so often happens in general practice tragedy is in the picture. Always birth and death have traveled hand in hand. In keeping with this sad sequence the beautiful first issue of this worthy Journal carries the obituary of the gifted Editor.

The cloud of such a circumstance must cast its shadow and heads must be humbly bowed but life as well as death must have the general practitioner's attention. This sad event duly solemnized will not deter the founders of this Journal. We predict for it a great future.

RAYMOND MOLEY ON REGIMENTED MEDICINE

After a month in England Mr. Moley is more than ever before impressed with the disastrous effects of socialism in Great Britain and our own rapid progress on the road which has led to such dire results.

He points out the fact that even labor unions in Great Britain are losing their freedom and he wisely employs Britain's experience with socialized medicine as the best example of what socialism can do to a free people.

Through his lectures and his writings urging the people of the United States to heed Great Britain's experience he ranks as one of medicine's best publicity agents.

THE PEACE OFFICER

The official publication of the Oklahoma Sheriffs and Peace Officers Association under the above title has just come to the editor's attention. The March, 1950 edition of this noteworthy magazine contains much of general interest and not a little that may well concern the members of the medical profession. The psychological aspects of the criminal's record belong to medicine and should have much more attention than they now receive. This is particularly important in the assessment of guilt and the determination of the penalty. The State Medical Association extends greetings and congratulations to the officers of this organization and to the editor of *The Peace Officer*.

SCIENTIFIC ARTICLES

MULTIPLE MYELOMA

P. E. RUSSO, M.D.

H. R. BENDER, M.D.

OKLAHOMA CITY, OKLAHOMA

Multiple myeloma is a malignant disease of the bone marrow. It has been recognized as a clinical entity for almost a century. However, it has only been in recent years that any large number of cases have been described. Where formerly isolated cases were reported, now extensive series appear in the literature.¹ The study of larger series of cases has emphasized certain features in this disease that should prove helpful in a more accurate and earlier diagnosis than was possible in the past.

The purpose of this paper is to discuss some of the salient features of multiple myeloma in light of the recent literature and our experience with 17 cases collected at the University of Oklahoma Hospitals in the last 10 years. Our interest has been stimulated in that we have seen eight cases in the last year and a half.

CLINICAL FEATURES

Multiple myeloma is a disease primarily of the older age group. We found the average age to be 61, the oldest patient was 75 and the youngest 45. Others report average age from 55 to 57.² Rare cases of multiple myeloma in younger patients have been reported.^{3,4} Eleven of our patients were men and six were women.

In all but two cases the outstanding complaint was that of pain. In the two cases in which pain was not the chief complaint there was pain present but was overshadowed by severe epistaxis in one case and paralysis of the lower extremities in the other. The pain was usually localized in the back or chest and occasionally both. The pain varied from severe and sharp in character to a constant dull ache. Motion usually aggravated the pain and consequently most of the patients eventually went to bed as they found that the pain could be minimized by complete bedrest. Coughing, sneezing, or vigorous respiratory movements would also frequently accentuate the pain. Radicular pain was present in six of the patients and was usually associated with compression deformities of the vertebrae. Many of the patients complained of tenderness on pres-

sure over the sternum and ribs.

Next to pain the most common complaint was loss of weight and strength. A high percentage (84 per cent) of our patients stated that they had lost from 30 to 40 pounds during their illness. There was usually an associated loss of strength.

Palpable masses were found in a surprisingly high number of our cases. Nine out of the 17 patients (52 per cent) had this finding. The distribution was as follows: skull, four; sternum, four; ribs, two; spine, one; mandible, one; scapula, one; clavicle, one; and humerus, one. One patient had six palpable masses. Another developed a large mass in the region of the symphysis of the mandible.

Pathologic fractures occur frequently in this disease. Geschickter and Copeland² report an incidence of 62 per cent. On the other hand Bayrd and Heck¹ found pathologic fractures in only 16 per cent of their cases. In addition to compression fractures of the bodies of the vertebrae, 41 per cent of our patients were found to have fractures at other sites — primarily in the ribs. One patient had several fractures with a femur, tibia, several ribs, and one radius involved. Others have observed fractures of the clavicle, sternum and proximal ends of the long bones. Not infrequently a patient will give a history of fracture resulting from minimal trauma. Two of our patients stated that they fractured ribs while turning over in bed. Another stated that he felt several of his ribs crack when he lifted an empty oil drum down from a platform.

Radicular pain was present in six cases and was usually associated, as mentioned previously, with compression fractures or wedge-shaped deformities of some of the bodies of the vertebrae. One patient developed a complete paraplegia.

Hemorrhage was an infrequent complaint in our group. One patient developed severe epistaxis while in the hospital which was finally controlled by packing. In another case epistaxis was one of the chief complaints when the patient was admitted. There ap-

pears to be considerable correlation between a high globulin fraction in the blood serum and a tendency toward bleeding in this disease.¹ One of our patients with epistaxis had a high serum protein with reversal of the a g ratio.

RADIOGRAPHIC FINDINGS

Roentgenograms of the bones are frequently helpful in the diagnosis of multiple myeloma. An analysis of our records showed that the diagnosis of multiple myeloma was originally suggested by the radiologist in 10 of the cases (58.8 per cent) where the diagnosis had not been entertained clinically. In four other cases the condition was suspected clinically before x-rays of the bones were taken and the impression was confirmed by the x-ray findings. In the three remaining cases the condition was not diagnosed until biopsy material was examined histologically. (Fig. 1).

Some authors² have reported a high percentage of cases of myeloma in which the skeleton was negative by x-ray study. However, every one of our cases showed definite changes. Difficulty in proper interpretation arises when the picture is not that of the classical type. Recently it has been pointed out that there are subtypes of multiple myeloma.³ In addition to the classical variety with multiple punched out areas, there are cases in which there appears to be only one lesion — the so called solitary myeloma. Occasionally there are cases in which osteoporosis is the only abnormality noted.

The majority of our cases, 15 (88 per cent), were of the classical type. These cases exhibited the typical punched out areas of rarefaction, with absence of surrounding bone reaction, varying from one mm. to two or more cm. in diameter and involving primarily the ribs, skull, pelvis, femora, clavicles and humeri. Several of these cases were mis-diagnosed as metastases. In one patient carcinoma of the thyroid was suspected, and in another a neurogenic tumor because of a large destructive lesion of the spine. (Ill. 1, 2).

Diffuse carcinomatosis of the skeleton is occasionally difficult to distinguish from multiple myeloma radiographically. Recently one of us (P. E. R.) reviewed 30 cases of bone metastases and found only a few with multiple osteolytic lesions that might be confused with multiple myeloma. However, in most of these cases there was definite evidence of bone reaction around the lesions, which is rarely found in myeloma. Our experience has been that we have made more

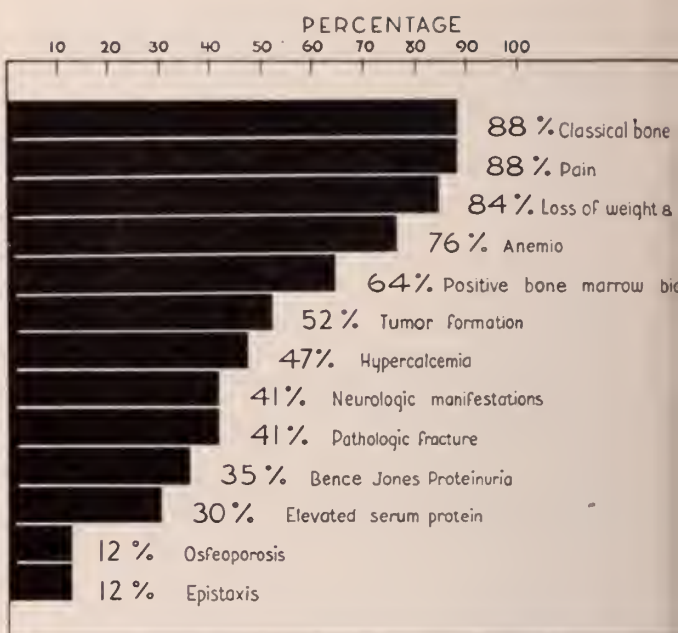


FIG. 1. Percentage of occurrence of clinical, radiographic, laboratory abnormalities in 17 cases of multiple myeloma.

errors in calling multiple punched out bone lesions metastases than when the diagnosis of multiple myeloma received primary consideration.

Osteoporosis was the chief manifestation in two of our patients. In one case the involvement was localized to the spine and associated with collapse of several of the vertebrae resulting in paraplegia. Osteoporosis with wedge-shaped deformity of the bodies of the vertebrae is the usual finding in the spine⁴ rather than the punched out lesions seen in other parts of the skeleton. In the second case the osteoporosis was more diffuse and the oval osteolytic lesions were noted only on careful examination. It is this type of case particularly that may be overlooked. Osteoporosis is found in several conditions such as hyperparathyroidism, chronic renal disease and idiopathic senile osteoporosis. The latter diagnosis should be held in reserve until the other conditions have been ruled out.

We have failed to encounter any cases of solitary myeloma involving the skeleton. There are two types of lesions described; the multicystic type that resemble giant cell tumor, and the expanding destructive type without trabeculae.⁵ The former frequently appears in the pelvis and long bones, and the latter in the long bones and spine. Most authors believe that these lesions invariably become generalized usually within a year after they are discovered.

An interesting variant is the extramedullary plasma cell tumor.⁶ These are frequent-

ly found in the upper air passages. We have one case in which the tumor developed in the left maxillary sinus.

LABORATORY FINDINGS

While in many instances the diagnosis of multiple myeloma can be made from the clinical, roentgenological, and laboratory findings, the final proof is the microscopic study of the bone marrow. In the past, portions of tumor masses or sections of bone were removed surgically and examined histologically. In recent years sternal puncture has been used and has become an important diagnostic procedure in diseases involving the bone marrow. The method is simple and causes little discomfort to the patient and frequently definitely established the diagnosis of multiple myeloma. Plasma cells were found by biopsy or sternal puncture in 64 per cent of our cases.

Anemia was a frequent finding. In 13 (76 per cent of our cases the hemoglobin was 12 gm. or less, and red blood cells below four million. In nine of these cases the hemoglobin was 10 gm. or less and the R. B. C. was below three M. Excessive rouleaux formation and elevation of the sedimentation rate are also frequently encountered in multiple myeloma. The white blood count is usually within normal limits. Occasionally a leukemoid reaction does occur. This necessitates differentiation from leukemia. This is generally possible in that the blood smear in multiple myeloma shows an increase in myelocytes and myeloblasts but they show normal morphology.

For many years the presence of Bence Jones protein in the urine was considered a pathognomonic finding in this disease. Variable figures as to the frequency of this finding have been reported. Geschickter and Copeland² reported an incidence of 65 per cent, while Bayrd and Heck¹ noted this finding in 53 per cent of their cases. Aegeter and Robbins⁶ state that Bence Jones proteinuria is less common than previously supposed, and that a positive test is significant,

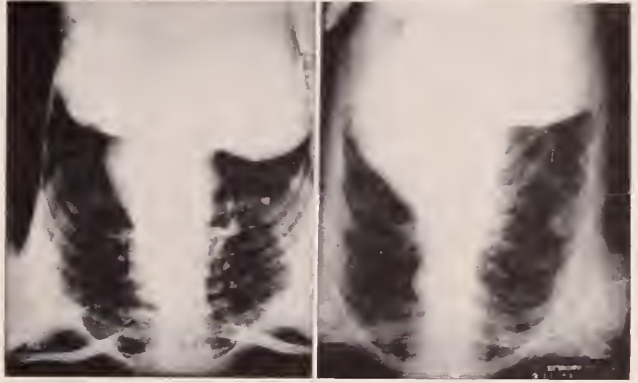


Illustration 1.

but that a negative test does not rule out the condition. Bence Jones proteinuria was found in 35 per cent of our cases.

TREATMENT

To date there has been no satisfactory treatment for this disease. We have achieved some palliation with relief of pain in a number of patients by use of roentgen therapy. To attempt to treat all involved bones would be impossible and inadvisable in most cases, so that, in our cases, the treatment has been directed toward painful areas and tumor masses. We have noted marked regression of myelomatous masses on several occasions. In one instance a negro woman complained of pain in the left eye and that the eye was bulging. An x-ray film of the skull showed a large osteolytic lesion in the region of the left orbit. Deep x-ray therapy was directed toward this area and the proptosis regressed and the pain was alleviated. Another patient developed a large mass involving the chin. X-rays showed considerable destruction of the mandible about the symphysis. The tumor mass regressed almost completely following deep x-ray therapy, and remained regressed up until death occurred a year later.

Snapper¹⁰ has reported favorable results, particularly relief of pain, by use of stilbamidine and pentamidine in conjunction with a diet low in animal protein.



Illustration 2.

Radioactive isotopes, Coley's toxin, high calcium and phosphorous diets with vitamin D; all have been tried with little significant effect on the progress of the disease.

Recently Loge and Rundles reported favorable results with the use of urethane. We have observed two patients treated with this drug with apparently little favorable response.

PROGNOSIS

The prognosis in multiple myeloma is unfavorable. The majority of patients die within 18 to 24 months, after the onset of the disease. An occasional case will have a more rapid course and survive only a few months. Rarely a patient will live for a longer period. We had one patient in whom the symptoms first appeared in 1942. This patient had extensive involvement and had numerous pathologic fractures. She finally died in May 1949.

CONCLUSION

We have studied 17 cases of multiple myeloma and our findings have been compared with similar reports found in the literature.

The clinical features of this disease, laboratory and radiological finding have been discussed including other methods of diagnosis.

The prognosis of this malignant disease remains grave and all methods of treatment available to date are purely palliative.

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MEET OUR CONTRIBUTORS

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Grider Penick, M.D., F.A.C.S., Oklahoma City, has an article entitled "Summary of Ten Years of Gynecological Service at the University Hospital" in this issue. Limiting his practice to the specialty of gynecology, he was graduated from Washington University Medical School in 1920. He is a member of the Oklahoma City Academy of Medicine, the Ob.-Gyn. Society, College of Surgeons and Central Association of Obs.-Gyn. He has been certified by the Obs.-Gyn. Board.

E. Evans Chambers, M.D., Enid, wrote "Surgical Treatment of Peptic Ulcer with Presentation of a Case" in the June Journal. A graduate in 1940 of the University of Oklahoma School of Medicine, he limits his practice to his specialty, surgery. He is a member of the following societies: Licentiate of Medical Council of Canada, Arizona State Board, Southern Medical, American Board of Surgery and Junior member of the American College of Surgeons. He is a delegate from Garfield County.

Louis R. Ritzhaupt, M.D., B.A., Guthrie, wrote "The Relation of Psychology to Surgery" in the June issue. Doctor Ritzhaupt was graduated from George Washington Medical School in 1917 and limits his practice to surgery. He is a member of the Masonic Lodge, Consistory, American Legion, American Poultry Association, Inc., and the Oklahoma State Senate. He is a delegate to the Oklahoma State Medical Association from Logan County.

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SUMMARY OF TEN YEARS OF GYNECOLOGICAL SERVICE AT THE UNIVERSITY HOSPITAL *

GRIDER PENICK, M.D.

OKLAHOMA CITY, OKLAHOMA

CONCERNING THE GYNECOLOGICAL DEPARTMENT

This paper represents a brief summary of some of the functions and accomplishments of the Gynecological Department of the University of Oklahoma School of Medicine since July 1, 1938.

I inherited a very smoothly working department from Doctor Kuhn at the time he became emeritus professor. I have been fortunate enough to have had the continued help of all of the active staff members he had collected. All of the inactive staff members who were on the roll when he retired have, for various reasons, resigned. In these 10 years two younger men, both excellently qualified, have been added, bringing the Visiting Staff up to a total of seven men.

It is, I think, one of the best balanced departments in the Medical School — some of the effervescent energy of the younger men being offset by the caution of the more mature — some of the more staid men being stimulated by the more progressive and some of the tempermental steam which occasionally is blown off, being effectively neutralized by the coldness of its reception.

This department, I believe, is organized in the most democratic way possible. Each of the men who are on the "Inpatient" service have "admitting" and "operating" days which in a year's time are equal to the days assigned to each of the other men. The lectures given to the third year class are divided approximately equally between all seven staff men.

As this report progresses, it is to be borne in mind that beginning in 1942 we gradually lost our men to the Armed Services until finally only the two oldest were left. These two men, with the assistance of the resident and house staff, attended to the Inpatient, Outpatient, Lecture and Consultation services for a period of approximately 20 months. At this time two of the men were back, but it was 1946 before all of them re-

turned. It was indeed fortunate that we had such excellent House Officers during that critical period.

FUNCTIONS OF A GYNECOLOGICAL DEPARTMENT

In a teaching institution the Gynecological Department has two primary functions: First, teaching; second, treatment of sick women.

The teaching is done on different levels. The highest level is the visiting staff. I know of no better way to learn than to prepare lectures, hold ward rounds or operate before a group of sharp students. Also, in a clinical way we see conditions at University Hospital which we might not see in private practice once in a lifetime.

The second level of instruction is that of the graduate students. We have trained nine residents in the period covered by this report (one man was unable to complete his training). This training now meets the requirements of the American Medical Association, the American Association of Teaching Hospitals, and the American College of Surgeons. We have each interne on our service for a period of approximately one month on a rotating basis.

The student teaching is both didactic and clinical. During the time of this report the third year class received 54 lectures each year and outpatient work — each student being in the Gynecological Outpatient Department 16 days. The seniors during this period were on the gynecological ward for three weeks during which time each man worked up from six to eight new cases and followed them until they left the hospital. In addition to the above, each student of the third and fourth year class had a gynecological-clinical-pathological conference each week throughout one half of the year.

In regard to the care and treatment of sick women: First, the ambulatory patients. These women are seen in the Outpatient Department. There are in reality two gyne-

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association May 18, 1949.

cological outpatient services — one for malignant pelvic disease — the other for all other gynecological diseases.

TABLE I

	NEW CASES		RETURN CASES OR TREATMENTS	
	Gyn Dispensary	Gyn CA	Gyn Dispensary	Gyn CA
1938-'39	739	59	4587	643
1939-'40	545	74	3931	874
1940-'41	579	74	4297	821
1941-'42	644	60	3426	746
1942-'43	596	67	3426	831
1943-'44	529	58	3413	803
1944-'45	653	61	3597	824
1945-'46	631	63	3472	912
1946-'47	504	69	3467	807
1947-'48	622	72	3133	774
TOTAL	6042	657	36759	8035
	6699		44784	

Table I shows the number by year and the total of the Outpatient Department admissions and returns. All of those patients in the second and fourth columns have proved malignancies. The two right hand columns show the return patients. Thus we see that we have had 6042 new gynecological cases plus 657 gynecological-carcinoma cases, totaling 6699, and 36,759 returns to the gynecological dispensary together with 8035 gynecological-carcinoma returns totaling 44,784.

TABLE II

	Total Admissions	Operations	Deaths	Death Rate Pct.
1938-'39	584	462	9	1.5
1939-'40	444	382	14	3.1
1940-'41	495	412	9	1.8
1941-'42	491	386	4	0.8
1942-'43	562	457	8	1.4
1943-'44	441	386	4	0.9
1944-'45	529	403	10	1.8
1945-'46	511	393	3	0.5
1946-'47	432	413	0	0
1947-'48	457	403	6	1.3
TOTALS	1946	4097	67	1.3

Table II shows the summary of inpatient service — 4946 admissions to the hospital of which 4097 women were operated. From 25 to 40 per cent of the patients are operated by the resident depending upon the ability of the individual resident. There were 67 deaths, giving an overall mortality rate of 1.3 per cent.

TABLE III

		Deaths	Pct.
Total Admissions	4946	67	1.3
Operations	4097	43	1.05
Pts. Not Operated	849	24	2.8

Table III breaks down the total inpatient admissions into the operative and non-operative cases with deaths and percentages. Of the 849 women who were not operated, 24 died — 2.8 per cent. Of the 4097 operated, 43 died — 1.05 per cent. The 24 deaths occurring in non-operated women included many advanced malignancies and moribund cases of sepsis.

Table IV is a breakdown of the causes of these 24 deaths. These women lived from two to 73 days after admission to the hospital, the average time being 29.2 days. It is obvious that the last three cases listed in this table did not die of gynecological disease, but all three of these women were admitted for treatment of abnormal uterine bleeding, so they were admitted on the gynecological service. While it is true that the Medical Service really handled these diseases of which they died, they were technically on the Gynecological Service, so their deaths must be included in this report.

TABLE IV

<i>Cervical Malignancies</i>	3
<i>Ovarian Malignancies</i>	2
<i>Sarcoma Uterus</i>	1
<i>Chorionic Carcinoma</i>	1
<i>Incomplete Abortion (Infec.)</i>	7
<i>Spontaneous Rupture Pelvic Abscess</i>	1
<i>Coronary Occlusion</i>	2
<i>Cardiac Decompensation</i>	2
<i>Septicemia with Endocarditis and Embolism</i>	1
<i>Transfusion Reaction with Urinary Suppression</i>	1
<i>Pneumonia (lobar)</i>	1
<i>Thrombocytopenic Purpura</i>	1
<i>Meningitis (Pneumococcic)</i>	1

Table V is a breakdown of causes of death and associated diseases in the 43 women who died out of the 4096 operated cases. Some of these fatalities are unquestionably "surgical deaths" and were due either to poor judgment as to the evaluation of the risk or faulty technique. However, by far the greater number of these women died as

TABLE V

<i>Cervical Carcinoma</i>	9
<i>Corpus Carcinoma</i>	1
<i>Ovarian Carcinoma</i>	6
<i>Bartholin Gland Carcinoma</i>	1
<i>Sarcoma of Uterus</i>	2
<i>Incomplete Abortion (Infec.)</i>	7
<i>Ruptured Pelvic Abscess</i>	1
<i>Peritonitis Following Hysterectomy</i>	5
<i>Peritonitis Following Removal of Cervical Stump</i>	1
<i>Pulmonary Embolism</i>	4
<i>Coronary Occlusion</i>	3
<i>Decompensation and Uremia</i>	2
<i>Hemorrhage following Hysterectomy</i>	1

a result of their disease. I have been unable to find in the literature an exact dividing line between a "surgical" or "operative" death, as opposed to a death from the normally expected course of the disease. These 43 women lived from five hours, post-operatively, to 68 days, the average time being 31.3 days.

Three of these women were operated as private patients of doctors who are not on our teaching staff (one-hemorrhage following hysterectomy, and two-infections, one following hysterectomy — the other an infected incomplete abortion who was curetted); however, for statistical purposes they must be included in this report.

A brief review of some of these deaths may be interesting. Of the nine cervical carcinomas who died, eight of them had radium implantations, the other a radical hysterectomy. The corpus carcinoma and the two uterine sarcomas each had radical hysterectomies. By this, I do not mean a Wertheim type of procedure, but a complete hysterectomy and bilateral salpingo-cophrectomy with a very low amputation of the vagina and a very wide amputation of the broad and cardinal ligaments. The patient with Bartholin gland carcinoma did not have a surgical procedure, but had a normal, spontaneous delivery of an eight and one-half month fetus. She lived 22 days following this.

The operative procedure in the group of seven cases of incomplete abortion who died was limited to a "D and C." On our service this operation is done on an infected abortion only when the blood loss becomes alarming. One of these women lived 62 days after surgery. Two of the deaths in the group of peritonitis following hysterectomy were in women who had calcified myomas. One was

TABLE VI

<i>Hysterectomies</i>	1726
<i>Adnexal Removal</i>	971
<i>Perineal Plastics</i>	963
<i>Radium Implants</i>	623
<i>Suspensions</i>	343
<i>D and C (Incomplete Abortion)</i>	221
<i>Ectopic Pregnancies</i>	178
<i>Ovarian Tumors</i>	127
<i>Interposition Operation</i>	46
<i>Complete Perineal Laceration</i>	44
<i>Richardson Composite Opr.</i>	29
<i>Recto-Vaginal Fistula</i>	19
<i>Congenital Defects</i>	18
<i>Urinary Fistula</i>	14

in a patient who had gangrene of the uterus associated with carcinoma of the corpus.

Three of the pulmonary embolic deaths followed hysterectomy. One followed a "D and C" for incomplete abortion. Two of the coronary occlusion deaths occurred in women who had both hysterectomy and repair of large incisional hernias. The other followed removal of a gangrenous ovarian cyst with twisted pedicle. The two women who died of decompensation and uremia had hysterectomies — one an abdominal, the other a vaginal. Both women were hypertensive.

Table VI shows the relative frequency of our operations. Some of the patients had multiple surgical operative procedures. For example, a woman might have a hysterectomy, removal of the adnexae and perineal repair. These cases are included in the table. Appendectomies are not included, nor are "D and C's" except for the "incomplete abortion" group. The "perineal plastic" group does not include the other plastic procedures listed below. Other operative procedures were so infrequent that they do not merit mention.

A moment ago, in Table V, we discussed the 43 deaths of operated patients from the standpoint of the causes of death and their associated diseases. Let us now examine these same 43 deaths from the standpoint not only of the operative procedure but the relative frequency of that operation, giving the numbers and percentages of each group. Table VII gives us these facts.

In considering the "Interposition Operation," "Congenital Defect", and "Urinary Fistula" group, the numbers involved are so small that the figures are not of much statistical value. This leaves the "Ovarian

TABLE VII

12 women of the "hysterectomy" group (total 1726) died;69%
3 women of the "adnexal removal" group (total 971) died;3 %
1 woman of the "perineal plastic" group (total 963) died;1 %
8 women of the "radium implants" group (total 623) died;	1.2 %
1 woman of the "suspension" group (total 343) died;32%
7 women of the "D and C" (incomplete abortion) group (total 221) died;	3.1 %
2 women of the "ectopic pregnancies" group (total 178) died;	1.1 %
6 women of the "ovarian tumor" group (total 127) died;	4.7 %
1 woman of the "interposition operation" group (total 46) died;	2.0 %
1 woman of the "congenital defect" group (total 18) died;	5.5 %
1 woman of the "urinary fistula" group (total 14) died;	7.0 %

None of the other three groups died. (the "complete perineal lacerations," "Richardson composite" or "recto-vaginal fistula" groups).

Tumor" group (4.7%), the "D and C" group (3.1%) and the "Radium Implant" group (1.2%), the three most dreaded conditions we met in an operative way.

The 1.2 per cent mortality in the "Radium Implant" group is of especial interest because the opponents of surgery in treatment of cervical (or to a less extent corpal) carcinoma always cite the high mortality of surgical treatment, never mentioning the mortality when treated by radiation. The radiation mortality varies from 1.0 per cent to 3.1 per cent in the various clinics, i.e. the immediate mortality.

CHANGING TRENDS IN GYNECOLOGY

In checking these operative procedures several marked changes of trend are noticeable. For example: the operation of hysterectomy. The first two years of this study show that 361 hysterectomies were done of which 68 per cent were supravaginal in type with destructive cautery of the cervix, 24 per cent were the complete abdominal operation and eight per cent were vaginal. In the last two years of this study there have been 390 hysterectomies of which 60 per cent were complete abdominal, 30 per cent were vaginal and 10 per cent supravaginal.

Thus, we see that in the operation of hysterectomy the tendency in this clinic is toward the complete abdominal operation. However, we do not feel that the cervix must always be removed, nor do we follow the lead of some authorities who feel that the greater percentage of hysterectomies should be done by the vaginal route. Our mortality of all hysterectomies was .69 per cent. This group is too small to arrive at any conclusion as to the mortality associated with various types of hysterectomy.

Likewise, the first two years show that 60 operations, seven per cent of a total of the 844 surgical cases, were done for uterine suspension. In the last two years 30 cases, 3.6 per cent of a total 816 operated cases were done for uterine suspension. Here again we have the temerity to disagree with many experts who feel that a suspension operation is never indicated. While our percentage of these operations is only half what it was 10 years ago, we feel sure that it is a valuable surgical adjunct in properly selected cases.

Another change in trend is noted in the shorter hospital time per patient. In this connection it is well to point out that the average bed occupancy is too long (especially true in charity beds). There are practically always some women in the hospital who have been dismissed, but the individuals responsible for taking them home (either their families or their county officials) do not come for them as soon as they should. There are always a few who do not need any special nursing care or treatment — who would do as well in a nursing annex if we had one available. This also should apply to patients who have incurable diseases and are not needed for teaching purposes. In brief, if we could use the few beds assigned to us for active cases and not have them tied up for long periods of time for patients with hopeless prognoses, we could handle many more patients.

In spite of the above conditions; however, we have had a more rapid turnover of the average operative patients to such an extent that we have been able to admit and treat approximately as many patients per year the last half of this decade as the first half when we had approximately 45 per cent more beds. This increase in rapidity of turnover has not been due to extremely early ambulation, but we do insist on these women getting up as soon as they feel like

it. This has cut off an average of almost four days per operative case.

This is also a noticeable change of trend in the causes of death. During the first few years infections (especially infected abortions) were the chief cause of death, closely followed by the malignancies. Since the advent of sulfonamides and antibiotics, the deaths from infection have markedly dropped. The mortality from malignancies continues approximately the same. Cardiac and nephritic deaths are definitely increasing. For example, from July 1, 1945, to July 1, 1948, there were nine deaths of which seven were cardio-renal-vascular. These seven women had all been worked out carefully and ok'd for surgery by the medical service. Three of them were not operated, but they died cardiac deaths. Of the four who were operated and died, none of them had especially severe or shocking surgical procedures. From this it would seem that a more accurate system of cardiac evaluation with more active treatment should be worked out for the patient who is a poor cardiac risk, but upon whom it is necessary, or is deemed wise, to operate. These remarks are not to be contrued as a criticism of the medical service. These men have worked with us in an extremely cooperative way. I sim-

ply mean that the present state of knowledge concerning the evaluation of this type of patient is insufficient.

I would like to present the statistics on the non-fatal complications and morbidity during this 10 year study, but am unable to do so because of insufficient clerical help. However, the fatal complications have been enumerated and discussed briefly.

SUMMARY

I have reviewed some of the activities of the Gynecological Department of the University of Oklahoma School of Medicine for a period of 10 years, giving some statistics relative to the Outpatient Department and the Inpatient Service. During this time there have been numerous changes; for example, changing operative techniques, advent of the sulfonamides and anti-biotics, decreased hospitalization stay per operative case, change in causes of death, etc. Suggestions have been made which we think would improve our service.

I am indebted to Doctor R. D. Ansbaugh for the statistics on the malignant group of cases. Miss Alford (chief of the record service), Miss Garrett (chief nurse of the Outpatient Department) and Miss Chapman (chief nurse of the Operating Room) have assisted in the compilation of these data.

SURGICAL TREATMENT OF PEPTIC ULCER WITH PRESENTATION OF A CASE*

F. A. HUDSON, M.D.

AND

E. EVANS CHAMBERS, M.D.

ENID, OKLAHOMA

We present this case because most of the things that can happen with duodenal ulcer happened to this man, who was 57 years old at the time of his first serious trouble. His previous history was rather negative. There was some indefinite history of indigestion. He was brought to the hospital on February 21, 1944, with a perforated duodenal ulcer, presenting enormous induration on the anterior surface of the duodenum, with the perforation in the middle. The defect was closed and he made a good recovery. He did very well, but developed a ventral hernia which was repaired in November of the same year. On January 19, 1946, almost two years after his first operation, he was brought to the hospital bleeding from his stomach. He

insisted he had been on a diet which he probably had not followed very closely, in spite of his statement to the contrary. He denied having had any trouble until quite recently. He was given the ordinary treatment, including blood transfusions, and left the hospital again, apparently in good condition.

About two years later, March 13, 1948, he returned to the hospital with a very active condition in the upper abdomen, which he stated was of two weeks duration. He had very severe attacks of pain and was vomiting a good deal, and got no relief from food. We found a mass of adhesions in the upper abdomen. The duodenum was densely adherent to the pancreas and there was an ulcer in the duodenum which had perforated into the pancreas. There was a great deal of

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induration, producing a tumor-like mass. A subtotal gastric resection was done and he made a good recovery from this operation.

Five months later, August 3, 1948, he was brought back to the hospital with a very acute abdomen, and stated his trouble had begun that morning, but on questioning him closely, he admitted he had had some pain previously. This time we found that he had a jejunal ulcer which was perforated. The perforation, which was very large, was closed and a vagotomy was done. He again made a very good recover.

He was back in the hospital within two months with very severe hemorrhage, and in the next few days he was given 4400 cc blood. He again made a good recovery and was dismissed, apparently in good condition. October 19, 1948 he was again back in the hospital with another severe hemorrhage. His blood pressure was down to 60/50. He bled at intervals for three weeks and was given enormous quantities of blood and the next month was operated again. He had a large jejunal ulcer, about $\frac{3}{4}$ inches in diameter. The anastomosis between the stump of the stomach and the jejunum was taken down, the ulcer in the jejunum was removed, the jejunum repaired, and about half of the remaining part of the stomach was removed and the jejunum distal to the original anastomosis was brought up and anastomosed to the remaining part of the stomach. This last procedure was about five months ago and he is still doing well, but we don't trust him.

The etiology of peptic ulcer is not definitely established and all theories fail to explain the fact that the condition attacks four times as many men as it does women, unless a nervous element applies here. It is generally believed that there is one common factor, and that is the action of hydrochloric acid on the duodenal mucosa. Other factors mentioned are — over hot foods, hyperacidity, hematogenous infections of the mucosa and neurogenic factors. The condition has been explained as due to hyperacidity, hypersecretion, hypermotility, hormonal stimuli and psychic stimuli. A great deal of attention has been paid to the latter, rather recently.

The majority of opinion in regard to treatment of duodenal ulcer is that they are primarily medical problems. Perforation, intractability, repeated or persistent hemorrhage, pyloric stenosis, or ulcers penetrating into adjacent organs are regarded as surgical problems. Gastric ulcer tends to be a

surgical problem in a majority of instances because of the frequency in which ulcers of the stomach are malignant, especially those on the lesser curvature near the pylorus, or on the greater curvature. All ulcers of the stomach are regarded with suspicion as potentially malignant.

There are many surgical procedures, the most common of which are plastic operations on the outlet, called pyloroplasties; short-circuiting procedures, such as posterior and anterior gastrojejunostomies, subtotal gastric resections and vagotomies. The original operations were one of the first two, and they are still useful. There is a good deal of controversy about the efficiency of vagotomy and at this time subtotal gastric resection seems to be the most satisfactory procedure, except where it is contra-indicated. This is especially true in gastric ulcers.

Since March of 1946, our surgical service has seen approximately 105 cases of peptic ulcer. This is exclusive of the medical service. 58 were operated. There were 15 acute perforated ulcers, four gastroenterostomies, 18 pyloroplasties and 21 subtotal gastrectomies. The pyloroplasties were done mostly at the same time as some other surgical procedure, such as cholecystectomy, and were mostly on older people. There was one death in the 58. This was an acute perforation, and the death was due to a pulmonary complication. Most of these patients are still under observation and doing satisfactorily. We try to keep them on a modified ulcer diet.

SUMMARY

1. There is still a great deal to know about peptic ulcer, and the etiology continues to be problematical.

2. There appears to be much disagreement about the treatment. Duodenal ulcers should be given adequate medical management before surgical intervention, and gastric ulcers appear to be predominantly surgical cases.

3. Gastroenterostomy and pyloroplasty continue to be useful procedures under certain conditions in duodenal ulcer, although where surgical intervention is indicated in duodenal ulcer, gastric resection is the procedure of choice in the majority of instances, taking for granted that the resection is adequate.

4. Gastric ulcer, with some few exceptions means a gastric resection.

5. The value of vagotomy is still controversial. It will take time to establish its place in gastric surgery.

THE RELATION OF PSYCHOLOGY TO SURGERY*

LOUIS R. RITZHAUPT, M.D.

GUTHRIE, OKLAHOMA

As others see us, so we are. We are masters of our own destiny in direct ratio to our ability to influence the public. They must accept us in a definite category, socially and professionally. As a surgeon, is it training versus personality or must it be a combination of both? Perhaps medical education today places too much emphasis on technical training which tends to make the student forget that he is a living, human being, and that he must surely depend on the impression he makes and the influence he exerts on his fellowmen.

Before anyone can be a surgeon he must have established a good reputation as a man. He must have attained a thorough medical education with ability to determine the cause of patients' illnesses and what it takes to effect a cure. If surgery is necessary the following problems must be considered:

1. Evaluation of the patient's emotional condition; his relationship with, and confidence in, the surgeon.

2. The significance of the operation to the patient.

3. The type of operation, its magnitude and the procedure which will be followed.

4. Problems of the night before and day of operation.

5. Immediate post-operative care and hospitalization.

6. Period of convalescence after leaving the hospital.

Psychology is nothing more or less than evaluating the patient's mental condition, this may be very difficult unless the surgeon and patient have had more than a passing acquaintance.

When a patient walks into your office, the receptionist greets him and secures his name, address, occupation, age and marital status, then asks him to sit down. He is apt to get the impression that he is just another "case" in the doctor's crowded day. If he has to sit long, he becomes restless. If he does, a receptionist with psychological training will

notice this and call the office nurse, who in turn will invite the patient into one of the consultation rooms. The nurse if properly trained will take the history and other data that will establish the doctor's first acquaintance with the patient and his chief complaint, also give him an opportunity to know the proper mode of approach. The patient's first impression may be a lasting one, listen to him, you can evaluate his emotional condition, and decide how rapidly to proceed with the examination and when best to tell him what it takes to cure.

Unless a patient has an acute condition that needs immediate surgical intervention, or has been seen by other physicians who advised surgery, it is seldom expedient at the first consultation, even in the most stable individuals, to say, "you should have an operation." Most people are looking for the easiest and least expensive way out of their difficulty. Only after you are sure you have gained the patient's confidence, should you tell him that surgery is advisable. Immediately he will counter you with, "Doctor, will the operation cure me?" This brings us to the question, what does the operation mean to the patient?

In the minds of everyone there is a threat of danger, and a certain amount of suffering is expected with the loss of an organ. The patient needs to know what relation this loss will have to his future welfare, the chances of permanent cure, and the prospects of living a normal life.

In answering these questions we come to the third phase of our problem, the description of the operation. In telling this we must have thoroughly established the emotional status of the patient. To some, we can describe the procedure and the magnitude of the operation and the results to be expected, while in others, this would produce a "fright neurosis" resulting in hours of irritability, sleepless nights, attacks of anxiety followed by cardiac and respiratory distress and probably vasomotor and secretory disturbances which would vitally affect post-operative recovery. It is important to pre-

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pare the patient for the news.

After the patient agrees to the operation, the surgeon should relieve him of all hospital and nursing arrangements, other than the financial obligations.

The reception that the patient receives on entering the hospital will have a definite bearing on his composure. The pre-operative orders should be in the hands of the admittance clerk when he is admitted, and the patient told that the nurses are ready to carry out the doctor's instructions.

The family should be informed of the hour of the operation. The patient should be sedated to receive a good night's rest, with proper pre-operative medication to quiet his fear and anxiety when he goes to the operating room. Do not forget the child will require special attention.

After the operation it is advisable to assure the family as to the immediate condition of the patient and what may be expected from surgery. If in your own mind you are sure that the results will be satisfactory, so inform the family, and as soon as the patient regains consciousness, by their actions and words they will convey the message to the patient. It will immediately reassure him of his recovery. If unsatisfactory results are to be expected or the patient has some incurable condition, the family should be cautioned against in-

dicating such to the patient, and leave the bad news to be told by the doctor.

If the surgeon has established the proper confidence in his patient and has been accepted as a friend, his morning and evening call will be eagerly anticipated. A gentle touch, a word of encouragement and assurance of the favorable condition will do much to stabilize the patient's emotions. The ability of nurses to understand the patient's emotions and his psychological reaction to treatment is an important factor in his recovery.

Convalescence and complete recovery are carried to the fullest extent by proper medication and advice, but are closely associated with the surgeon's ability to continue controlling the psychology of the patient.

In conclusion, I am of the opinion that a surgeon should have a wide knowledge of psychology, but should himself have a very adaptive, positive personality, a sympathetic and understanding attitude, with the ability to carry the mental burden of his patients. By power of suggestion, he should be able to carry them through the dark hours following surgery and show them the broad lighted way of recovery. Certain individuals have a psychomatic make-up which naturally qualifies them, with proper training, to become surgeons, and give their fellowmen physical and mental restoration of health with prospects for a brighter future.

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EARLY AMBULATION OF SURGICAL CASES*

J. V. ATHEY, M.D.

BARTLESVILLE, OKLAHOMA

In July, 1946, I read an article which appeared in one of the most widely circulated lay magazines entitled "They Get Up And Live". I started to read the article rather casually, thinking it was just another layman writing on a subject which should be left to medical men. I found that many of the postoperative measures described were radically at variance with what most surgeons have heretofore considered sane and conservative procedures, and I began to read more carefully. After re-reading the article my curiosity was aroused to the extent that I secured most of the published literature on the subject. I found that many good surgeons, some of them of national repute, were advocating and practicing early ambulation and activity.

I read a very fascinating symposium on "The Abuse of Rest" in the *American Medical Association Journal* of August, 1944, in which the participants were Tinsley R. Harrison, M.D., of Dallas, Nicholas J. Eastman, M.D., of Baltimore, J. H. Powers, M.D., of Cooperstown, N. Y., William Dock, M.D., of Los Angeles, Ralph K. Ghormley, M.D., of Rochester, Minn., and Karl Menninger, M.D., of Topeka.

The following paragraphs are quoted from Doctor Dock's discussion of "The Abuse of Rest."

DOCTOR DOCK: "Man's perversions from normal mammalian or even simian behavior make him the scandal of the biologic world. He not only walks erect, like birds and the anthropoids, but continues to drink milk all his life, to eat eggs, and to make love at all seasons. He uses drugs such as nicotine and caffeine daily, alcohol and cathartics almost as often, and sometimes to great excess. In the past century he has outdone himself with new perversions. He has increased his maximum velocity of movement from 18 miles an hour to 60 and then to 500, the hazard increasing roughly as the cube of the velocity. He has taken to working and living on

mountain tops and deserts; he rises to heights where the barometric pressure is one-fifth normal, and dives to depths where it is 10 times normal. Unlike all other mammals, man sleeps on his back, and lies recumbent when ill. Until the Florence Nightingale era the sick usually got up several times daily for elimination, if not for meals; but, thanks to nursing progress, thousands of people now lie recumbent, at absolute bed rest, for days, weeks or months. As with all the other perversions from biologic normality, this too must be paid for by discomfort, invalidism and death.

"Bed rest robs the bones of chalk, as it causes an immediate, severe, negative calcium balance. It greatly weakens vasomotor tone and wastes the voluntary muscles. It causes hyperemia, edema, and collapse of the dorsal parts of the lungs. It predisposes to ulcers of the skin and to hypostatic pneumonia. In elderly men it often precipitates severe symptoms of prostatism, and it is a notorious background for many cases of cathartic habituation. The effects on the psyche of this unnatural way of life are noted even by laymen like Tolstoi, Henry Adams and Balzac.

"The recumbent posture is unphysiologic: it is, when long maintained, hazardous to the psyche, the physical well-being, and even the lives of adult patients. Since it is widely used, it claims more lives than all other therapeutic agents put together. It must be thoughtfully applied, promptly discontinued when no longer necessary, and its application must be supervised with meticulous attention to its hazards."

It is well known that in 1809, the Kentucky surgeon, Dr. Ephraim McDowell, did the first oophrectomy, more than a quarter of a century before the advent of anesthesia. It is not so well known, however, that his patient initiated a procedure that was not to be put into effect until nearly 100 years later. Dr. McDowell related that when he visited this patient on the fifth postoperative day, he found her up and making her bed.

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We all know that she lived and was healthy many years thereafter.

In 1899, Ries, of Chicago, experimented with a group of patients, having them get up and walk within three or four days post-operatively, and found that they had fewer respiratory complications and less thrombophlebitis than the controls.

Again, about 1908, German and French surgeons played very lightly with early ambulation, but the practice fell into disuse.

In 1932, at the Henry Ford Hospital, the man for whom the hospital was named, and its owner, at the age of 69, anticipated the new streamlined early-rising treatment for patients, by insisting on being up and having bathroom privileges a few hours after an abdominal operation. This alarmed and distressed his doctors and nurses, but he had a very smooth convalescence, and was out of the hospital in 10 days.

Dr. Daniel J. Leithauser, staff surgeon at St. Joseph's Mercy Hospital in Detroit, relates that his interest in early rising began in 1938, and gives the following case history: "R. H., 38, disregarded orders and left his bed frequently to go to the toilet and to carry water to other patients in the ward a few hours after an appendectomy. Improvement was rapid as a result of frequent ambulatory activity, and on the following day he insisted on leaving the hospital. I was unable to convince him of the 'danger' of such a procedure, and he left at his own risk. On the second postoperative day he drove 30 miles to run errands in busy downtown Detroit; on the third and fourth days he worked in the garden; on the fifth he drove 40 miles for his first medical inspection following the operation. He was in excellent condition. This unusually rapid convalescence aroused my interest."

Since that time Dr. Leithauser has had all his surgical patients practice early (first day) ambulation and he gives results in two groups, one of 464 and one of 900 patients. In the first group the patients were all up within 24 hours and their average stay in hospital was 9.04 days. In the second group the average time of walking was 1.3 days and the average stay in hospital was 10.1 days.

There were three deaths in the first series and four in the second. Causes of death in the first series were (1) "coronary attack", (2) "subhepatic abscess", (3) "hepatitis". Other complications were two pneumonias, one dehiscence (charged to "avitaminosis"), and one to thrombophlebitis.

All of these recovered.

Leithauser reviews 29 foreign articles, all but two of whose authors were strong advocates of early activity. The two who opposed it conceded that they had had no experience with the procedure. These reports covered over 15,000 patients, with only four deaths from embolism, Dr. Leithauser also gives a report on another group of 436 cases in which no dehiscence, hernia, pneumonia or thrombophlebitis occurred. He gives details of exercises which his experience taught him were most effective in the early restoration of bodily function.

In June, 1938, the *Journal of the American Medical Association* had a long editorial summarizing the work of Dr. Campeanu, of Bucharest, Rumania, in early activity following surgery. This editorial makes very favorable comment on Dr. Campeanu's report of cases, but it is too long to repeat here. One statement might be noted: Campeanu did much of his major surgery under local anesthesia, and his patients *walked* from the operating room.

Newburger, of Cincinnati, in 1942, conducted a series of experiments in wound healing in rats, using suitable controls. He forced activity by having the early risers run on a revolving wheel for several hours each day. He devised delicate apparatus to test the strength of pull necessary to break open abdominal wounds. He found that from the fifth to the tenth day the wounds of the rats which had forced activity were nine per cent stronger than the non active controls.

Several of the other articles studied give approximately the same increase in wound strength following early activity.

In speaking of objections, Newburger says: "Most of the objections are theoretic, while others have been arrived at after experience. Two of these objections are failure to protect from fatal emboli, and interference with wound healing, bound up with the fear of medicolegal consequences. Others, of much less moment, are that patients are too miserable postoperatively to be subjected to any activity, that bed rest is of value to laborers, and that the heart is weakened or that the cardiac minute volume is reduced following operation. They have all been proved, with more or less certainty to be fallacious."

Blodgett and Beattie summarize 681 cases as follows: "Patients who rose early were considerably stronger and had less pain in their wounds. They were able to care for

themselves on about the fourth postoperative day and were ready for discharge considerably earlier than the control group." "The incidence of wound disruption and wound infection was somewhat lower in the early rising group." "The incidence of deep leg vein thrombophlebitis was observed to be somewhat greater in the early rising group."

In an elaborate summary Powers reports that in 120 patients the temperature and pulse of the early risers were affected favorably and that no notable changes in blood pressure occurred; that the average number of days in hospital was 9.7 for the early, and 15.4 for the late risers; that return to normal diet was 4.2 days for early, and 8.7 for late risers; that the average number of doses of morphine or other opiate was 2.6 for early and 5.6 for late; that 24 per cent of early risers had abdominal distension as against 50 per cent for the late; that 33.4 per cent of early risers had gas pains against 69.4 per cent of late.

In another group, number not stated, Powers found 27 per cent having either wound, chest or circulatory complications against 55 per cent in controls, and that the average time of convalescence was five weeks for early risers against 10 weeks for controls.

He summarizes as follows: "Early postoperative activity, walking and other acceleration in customary convalescent care provide safe innovation in postoperative management by which the process of deconditioning may be largely eliminated and early rehabilitation achieved. Data submitted above support these conclusions."

OBJECTIONS

The chief obstacles to early walking seem to be fear in the patient and respect for

conservative traditions by the doctor. As Newburger says most objections are theoretic rather than practical.

ADVANTAGES

The advocates of early ambulation cite these advantages: pain, nausea and distension reduced; smaller amount of postoperative sedatives needed; less danger of wound disruption, pneumonia or other chest complication, and thrombophlebitis; vital capacity restored earlier; less expense to patient because of shorter stay in hospital. There is also a decided advantage to the hospital in these days of bed demand and nurse shortage in that the turnover is greater and more patients can be cared for.

The above was the original paper. Within the last three months review of all the available literature on the subject since 1946 shows approval of the procedure, with expressions like the following: "Restores physiological processes early"; "brightens mental outlook"; "Complications less frequent"; "earlier return of normal bowel and bladder function"; "improved morale"; "Fewer opiates necessary"; "Fewer hernias; patient out of hospital earlier"; "Atelectasis, pneumonia and thrombosis reduced"; "Marvelous advancement".

It goes without saying that shock is a definite contra-indication to early activity: but some of the writers state that these cases can, when the shock symptoms have lessened, be more active than was formerly thought wise or judicious.

SUMMARY

A review is made of all the available literature on "Early Postoperative Activity," showing favorable reports by forty or more essayists, and no opposing arguments.

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CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Surgery*

HOWARD C. HOPPS, M.D., AND A. C. LISLE, JR., M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HOPPS: This is the story of a young lady who was in fairly good health until shortly before her death. This very interesting neurologic problem will be analyzed by Dr. Lisle.

PROTOCOL

Patient: I. M. H., 36 year old white female.

Chief Complaint: Intermittent frontal headache (1½ weeks).

Present Illness: The patient had experienced intermittent dull aching pains in the back of her neck for 8 or 9 months. These had apparently been initiated and were aggravated by "colds". The episodes would last a week or so at a time and were not of sufficient severity to cause her to seek medical attention. Nine days before admission she awoke with a generalized headache. However, she ignored it and proceeded throughout the day with her routine household duties. That evening she "felt something pop" high in her neck, and she was seized with a sharp excruciating pain in the back of her neck in the occipital region. The pain radiated to the top of her head and to the right frontal region just over her eye. It was of sufficient severity to cause her to scream at its onset. Within a very few minutes she became nauseated and vomited. She had no anesthesia, paralysis or speech difficulties. She was placed in her local hospital. Off and on for the remainder of that night and through the early part of the next day, she vomited several times. She felt nauseated during most of this time. Her pain receded, and there were only sharp instantaneous pains of gradually decreasing intensity. By her third day of hospitalization she had apparently recovered and was sent home. For the next three days she felt fairly well except for a vague "tired and aching" feeling in the frontal and occipital regions. However, three days before admission she again experienced the popping sensation high in her neck and the sequence of pain followed as before except that this time it was more severe. Shortly after the attack she lost consciousness and remained

so "until sometime the next day". She was again placed in her local hospital. Upon regaining consciousness she again noted no numbness, paralysis or speech difficulties. However, her relatives noted that her right eyelid drooped slightly. Her only complaints at that time were occipital pain when her head was jarred and some discomfort in her neck when turning her head to the right. She was given only symptomatic therapy by her local physician who subsequently referred her to University Hospitals for evaluation and further treatment. A review by systems was essentially negative.

Past History: Since birth the patient's right leg had been shorter than the left and as a result, she walked with a decided limp. There was no history of previous illnesses, trauma or surgical procedures. She denied having had any venereal diseases. She had had three uncomplicated pregnancies which resulted in three healthy children.

Family History: Father and mother were living and well. One brother had diabetes.

Physical Examination: T. 98.0°; P. 90; R. 20; BP 124/82. The patient was well developed and well nourished. She was alert, well oriented and cooperative. There were no speech difficulties or motor aphasia. Examination of her ears, nose and throat was negative. The heart and lungs were within normal limits to percussion and auscultation except for a faint (grade I) apical systolic murmur. Abdominal and rectal examinations disclosed no abnormalities. The right leg was about 2 inches shorter than the left; it was the opinion of the examiner that this probably represented a congenital dislocation of the right hip. Neurological examination could disclose no sensory disturbances. The pupils reacted only slightly to light (left greater than right) and no reaction to accommodation could be detected. There was definite ptosis of the right eyelid. The optic fundi exhibited marked recent choking of the disks, bilaterally, and about equally with recent hemorrhages around the larger vessels. The cranial nerves were otherwise completely negative. The deep tendon reflexes

were moderately increased bilaterally. Abdominal reflexes were present. No pathological reflexes could be elicited. There were no signs of cerebellar dysfunction. Position sense was normal. There was no paresis or paralysis. Kernig and Brudzinski signs could not be demonstrated. Flexion of the neck to the right produced a sense of discomfort in the right side of the face and neck.

Laboratory Data: Admission urinalysis was essentially negative. Peripheral blood contained 14.5 gms.% Hb. with 5.28 million RBC's/cu.mm. Leukocytes numbered 12,800/cu.mm. with 62% neutrophils and 34% lymphocytes. The platelet count was 166,400, bleeding time 4 min. 15 sec. and coagulation time 2 minutes. The prothrombin time was 117% of normal. A blood Mazzini was negative. A repeat blood count on the first hospital day revealed Hb 12.5 gm.%, RBC's 4.76 million, WBC's 8,050.

Clinical Course: Shortly after admission, the chief of the neurosurgical service examined the patient and he felt that there was *no* choking of the optic disks. He noted that there were peripheral retinal hemorrhages as well as central ones. He felt that the skin on the right side of the patient's face was drier and more velvety than the left. A lumbar puncture on the first hospital day yielded an initially bloody fluid which cleared in the third tube. The opening spinal fluid pressure was 270 mm. of water, closing pressure was 155 mm. Queckenstedt's test revealed no block. The centrifuged spinal fluid was definitely xanthochromic and a count disclosed 146 crenated erythrocytes/cu. mm. Total protein was 10 mgm.%. The spinal fluid Wasserman was negative. The patient complained of occipital headache on the third hospital day. She was being prepared for angiography the next day but at 7:15 a.m. on the fourth day she was found dead in bed; rigor mortis was present.

CLINICAL DIAGNOSIS

DOCTOR LISLE: I know no more factual information about this case than each of you, but there are a few things we may go over together to gain better understanding. As far as we can tell this woman was in relatively good health before the onset of her acute illness except for a vague distress in her head. The most dramatic incident was the sudden "popping" sensation in her neck followed immediately by a sharp pain in the back of the neck and in the occipital region. This suggests to me a sudden vascular epi-

sode of some sort. Upon first thought a likely cause would be *subarachnoidal hemorrhage* or some similar process. The distress which followed in the suboccipital region might well have been in response to irritation from blood that escaped into the subarachnoidal space. The history states that she vomited several times. This might have been caused by a good many things. Neurosurgeons are most apt to think of some irritating lesion of the medulla in this connection. However, we are not sure that we know all of the centers of vomiting in the brain and there may be many others in different regions. Three days prior to admission at University Hospital she again experienced this "popping" sensation high in her neck, followed by this same type of pain. At this time she lost consciousness. Something very drastic must have gone on to produce this loss of consciousness. A thing that seems very important to me is the fact that she developed ptosis of the right lid. The right pupil was a trifle larger than the left. One would expect that in association with ptosis. You recall the innervation of the third nerve — that it controls the size of the pupil and all of the muscles of the eye except the superior oblique and the lateral rectus, which are supplied by the fourth and fifth cranial nerves, respectively. The lack of reaction to accommodation might suggest to some of you that the Edinger Westphal nucleus was involved. That is very unlikely I think, because any lesion of the brain stem serious enough to produce this impairment of accommodation would likely have produced death rather quickly. One observer reported choked disks, another denied this. At any rate there were retinal hemorrhages and we might say a word about these. There are two common types of retinal hemorrhage frequently seen in central nervous system diseases: (1) Flame hemorrhages ordinarily occur in massive increase in intra-cranial pressure and (2) subhyloid hemorrhages which are almost pathognomonic of subarachnoidal bleeding. The cranial nerves otherwise were completely negative upon examination. Deep tendon reflexes were increased bilaterally; abdominal reflexes were present. We have only one localizing sign, and that is in the third nerve on the right side. We can assume that we don't have a lesion over the convexity of the brain unless it is in a silent area. It is unlikely that such a lesion would produce a loss of the third nerve function or impairment of it, unless it were in the region of the right temporal lobe and

in such a position as to compress the third nerve. There is no mention made as to whether or not there was a bruit heard. I think all of us should get in the habit, if we are not already so, of using our stethoscope on people's head. You'd be surprised how much information may be gained from this.

In reviewing the past history I think it is quite significant that the patient was the mother of three healthy children and that her serology was negative. In a cerebrovascular episode, especially in relatively young persons, we must always consider *lucetic involvement* as a possibility. Searching further for some past episode of illness which might have a bearing we find very little except that her right leg was shorter than the left. It seems unlikely that this could have had any bearing on the case and I'll accept the statement that it probably was a congenital dislocation.

In checking the laboratory data, the low platelet count might be of some significance. The platelet count is a little bit low; the white blood count was found to be 12,000 initially, and later about 8,000. There are several blood conditions we might consider, one would be *thrombocytopenic purpura* because it may produce a situation much like this. Polycythemia vera and leukemia can also produce such changes, but I think the first is the most likely possibility in this connection — and it seems quite remote.

X-rays might have been helpful. We find that with central nervous system disease approximately 3% of x-rays of the skull will give positive evidence of an intracranial neoplasm or growth. About 40% of skull x-rays will show changes that are compatible with an intracranial lesion, for example, erosion of a clinoid process, an area of hyperostosis, shifting of a calcified pineal, or perhaps displacement of the choroid plexis (calcified). X-ray is not the final answer, but it may be very helpful.

During the patient's hospital course it was observed that the right side of the face was drier and more velvety than the left. This suggests the possibility of a process somewhere along one of the great vessels interfering with the sympathetic nerve. Lumbar puncture, done on the first day, initially yielded bloody fluid which cleared in the third tube. From this one might assume the hemorrhage to have been a result of the puncture, but we read on down and notice that there were 146 crenated red blood

cells cu.mm. I raise the question, when was this spinal fluid cell determination done? We know that it takes several hours for red cells to become crenated, so I will guess that they were there right along. The fluid was xanthochromic. It says here that the total protein was 10 mg.%. This I doubt. On the third hospital day the patient was being prepared for angiography. That's certainly a clue, isn't it? At 7:15, the fourth day, she was found dead in bed.

I'll conclude that the most likely process is *ruptured aneurysm*. In any young person that has a sudden subarachnoidal hemorrhage or sudden cerebrovascular episode, the most common cause is a ruptured aneurysm, intracranial. Since we only have one localizing sign, that relating to right third nerve involvement, the right internal carotid artery would seem a likely site. Most frequently these aneurysms arise at the junction or bifurcation of arteries because there is weakness in the elastic membrane of the wall at that point. By far the largest percentage of congenital aneurysms occur in the internal carotid artery, at just about the termination, where it divides to form the middle cerebral and anterior cerebral. Third nerve paralysis is the most typical finding for an aneurysm occurring in the internal carotid. It seems unlikely that the aneurysm would have been elsewhere because she doesn't have any signs of long pathway involvement — no paralysis, no sensory changes, nothing else. This fact is further borne out, I believe, by the presence of crenated red cells in the spinal fluid, indicating that she had a leak. I noticed that the Kernig and Brudzinsky signs could not be demonstrated. This is possibly correct, but very frequently, almost invariably, if the patient's state of consciousness is not too greatly impaired, there will be opisthotonos with positive Brudzinsky and positive Kernig signs. This is often a basis for misdiagnosis and I've seen a good number of children treated many months for tuberculous meningitis, etc., only to learn finally that they've had a small subdural hematoma that could possibly have been helped by surgery. When you see a patient with opisthotonos therefore, don't consider only meningitis because it can very well be the result of subarachnoidal hemorrhage with chemical meningitis. I suppose we could consider an *arterial venous anomaly*, but they are almost invariably on the convexity of the brain, most frequent along the middle

cerebral artery. Such a lesion, I believe, would produce contralateral signs on one side of the body or the other. Although almost all aneurysms are congenital, there are so-called *mycotic aneurysms* which arise from infected emboli, and one of these might produce similar signs and symptoms.

CLINICAL DISCUSSION

QUESTION: Could a colloid cyst have produced this picture?

DOCTOR LISLE: They are most frequently seen in middle aged so-called neurotic women. Of course we may see them at any age, but most frequently in that group. It is a rare lesion that produces a set of symptoms like this. Intermittent headaches that come on very suddenly and last for an hour or several hours and disappear. Very frequently they can be brought on by tilting the head upward or backward. There might be any of the symptoms of an obstructive type of hydrocephalus, e.g. choked disks or sudden drop in the pulse with rise in blood pressure. Anything in or about the hypothalamus that would suddenly obstruct the aqueduct for example, would cause damage or changes in the peri-aqueduct of periventricular nuclei around the third ventricle and might produce a state of profound somnolence, could give changes in water metabolism, simulating diabetes insipidus, or might produce a rage phenomenon, so-called sham rage that you've been told about. The classical finding in terms of diagnosis is the crescent shaped shadow revealed by ventriculography.

ANATOMIC DIAGNOSIS

DOCTOR HOPPS: That was a most excellent analysis, Dr. Lisle, and one that has been very instructive to us all. At autopsy the changes in the brain were the most significant ones. The brain was moderately increased in weight and size, as evidenced by flattened convolutions and narrowed sulci. There was a moderate pressure cone also, and I think that certainly the precipitating cause of death was increased intracranial pressure. As the dura was incised, in removing the brain, approximately 30 to 40 cc's of blood escaped and, in addition, there was approximately 75 cc's of clotted blood in the basilar portion of the right temporal lobe. The circle of Willis was carefully studied and the posterior communicating branch was found to be somewhat exaggerated with resultant imbalance of these vessels. This is very often found, particularly in conditions of congenital aneurysm, of

which this case is an example. Dr. Lisle was correct, therefore, in his surmise that death was an effect of subarachnoid hemorrhage produced by a ruptured aneurysm, congenital type. The source of hemorrhage was in the region of the right middle cerebral artery. This area had undergone dissolution with replacement by a cavity in the brain substance approximately 3 x 2 x 2 cm. which was filled with clotted blood. The subarachnoid hemorrhage emanated from this point. The right ocular motor nerve passed over this area of subarachnoid hemorrhage, thus explaining the localizing signs.

The exact source of hemorrhage in conditions of this sort is often impossible to determine, even at autopsy. Sometimes it can be determined if the brain is studied fresh and if the vessels are injected, with careful inspection to determine any point of leakage. We have discovered the source of hemorrhage from congenital aneurysms in a number of cases by this procedure. If the brain is hardened by fixation, as is customary before examination is made, the blood is clotted and it is then usually impossible to find the exact source of a small hemorrhage. Because the vessels in the brain are so very delicate, thin-walled and translucent, almost transparent at times, it is extremely difficult to trace them, especially in areas of massive hemorrhage.

The several other autopsy findings which were quite incidental included a subserous leiomyoma of the uterus, a primary tuberculous complex, pulmonic, fibrocaceous, apparently regressing and moderate hypostatic bronchopneumonia, probably related to the unconscious state.

To reconsider the problem of congenital aneurysms for a moment and to speak in broader terms than pertain just to this case, I should like to emphasize the frequency of their occurrence. Anomalies of the Circle of Willis are very common and aneurysms are frequently associated with such changes. They are often multiple and are called berry aneurysms because they look like gooseberries. They may become very large and remain intact or they may rupture when very small. Their location, usually at a point of bifurcation, predisposes to rupture because of increased mechanical stress at these points. They may rupture into the brain in such a manner as to produce intracerebral hemorrhage, although the rupture of a congenital aneurysm typically gives rise to

subarachnoid hemorrhage. This general subject should receive much more consideration than is often given. Differentiation between subdural and subarachnoid hemorrhage and intracranial hemorrhage of the ordinary type, is very often a critical point. Depending upon whether the diagnosis is correctly made or not, the patient may be successfully treated or may die. I want to make a very broad statement; Dr. Lisle may wish to disagree with this. Since we don't encounter these cases often, as do the neurosurgeons, perhaps it is worthwhile to generalize: (1) Ordinarily intracranial hemorrhage occurs more frequently in old people, is usually associated with hypertension and or atherosclerosis and generally produces sudden unconsciousness — typical apoplexy — with associated paralyses; (2) Subarachnoid hemorrhage on the other hand, characteris-

tically produces a pain as a prominent symptom — paralysis is absent or very minimal; (3) Subdural hemorrhage is usually characterized by gradually progressive changes leading to coma. Thus, intracranial hemorrhage is not ordinarily painful and does produce paralysis in contrast to subarachnoid hemorrhage which is ordinarily painful and which usually does not produce significant paralysis.

The final pathologic diagnosis was as follows:

- Subarachnoid and intracerebral hemorrhages, right, massive
- Bronchopneumonia, hypostatic, bilateral, moderate
- Primary tuberculous complex, pneumonitis, fibrocaceous
- Leiomyoma of uterus, subserous

MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

“Obesity” — by Maxine Davis — *Good Housekeeping*, May, 1950, page 13. This is a very interesting article to read and enjoy both by men and women. It is humorously written and hits the nail on the head. The reasons given by persons why they are fat such as the following: “It’s glands”; “It runs in the family”; “Lots of people just get fat as they grow older”; “It’s the change of life, it’s unavoidable”; “I just get fat. Everything I eat turns to fat. I eat like a bird and gain on a diet that other people reduce.” It goes on to show that most people eat more than they think and/or than they will admit. The virtues of exercise weight reducing salons are debunked fairly good. It states a two mile hike on level ground consumes the amount of fat put on by three graham crackers. The article puts the “bulk” of responsibility for losing weight square on the shoulder of the person’s will power. Will power can be defined as the force to let you eat one salted peanut and quit.

“Breast Feeding” — Milton I. Levine, M.D. — *Today’s Women*, May, 1950, page 139. The author follows the line of breast resistance and states in round about way that whatever the mother wants to do is best because if more or less forced or talked into nursing, she’ll develop a frustration later if she is unable or if she is able to, she might develop a feeling of antagonism for the child which would prove extremely detrimental to their relationship. The last line states “whichever method of feeding the mother undertakes, she should have no sense of guilt nor feeling of inadequacy.”

“The Obstetrician” — J. D. Rateliff — *Today’s Woman*, May, 1950, page 50. The article reviews the fact and reasons why the United States is just about the safest place to have a baby. The reasons given are better training and teaching plus more hospital de-

liveries. It states what a competent obstetrician does before delivery and at that time. This is third in a series on the medical specialties and they don’t give enough credit to the G.P.’s who deliver the biggest percentage of babies and therefore are the reasons for the excellent statistics.

“Birth” — J. D. Rateliff — *Woman’s Home Companion*, May, 1950, page 38. As you will notice the above article which appeared in the *Today’s Woman*, was written by the same person. He is sure a prolific writer but this article is very plainly written in easy readable fashion for the lay public. This deals only with labor and not pre-natal. He theories why labor starts and what takes place within the cervix and uterus in the different stages. Personally I feel the OB patient would enjoy reading this and it may even help them to cooperate more fully at that time. However, there are a few misrepresentations but nothing of much importance.

Also in this magazine is a large series of pictures of birth in the delivery room without anesthesia. There are many good camera studies but the comments under the pictures aren’t so hot.

“They Drink Away Their Toothaches” — J. B. Griswold — *American*, May, 1950, page 46. This is a report in a lay magazine by a lay writer concerning the addition of flourides to the drinking water in the state of Wisconsin. It definitely states that in Wisconsin alone, dental bills can be cut \$50,000,000 a year. Since I am not familiar with these studies from a medical journal report, I will withhold much comment but I certainly don’t like to see a lay writer say to the public, “If your area isn’t doing this — it is due to public health officials and dentists.” We will always have them and it is up to us to be able to give the true story from the medical literature.



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President's Page

The end of another year is at hand in the administration of the Oklahoma State Medical Association. Officers change, other elected personnel will accept new duties while others will remain in their present position all working together to build a new and stronger official body. Theirs will be the responsibility for continuing and improving upon the efforts of all of us who have gone before to meet the constantly arising problems of a changing socio-economic order involving the health, welfare and happiness of our people as individuals and of our nation as a whole.

It is no light responsibility. It cannot be accomplished without understanding throughout the medical profession of this state. It cannot be done without cooperation and faith in one another.

Serving as your President has been a great privilege and an experience to be cherished always. It has been a privilege to have worked with the members of this Association on so many matters of importance. Whatever good or whatever of benefit has come of it is due directly to the combined efforts of all of you, to your unselfishness, your willingness to serve the profession and humanity and your generous acceptance of our inexperience, ineptitudes and our mistakes.

When at times the going was difficult your many words of encouragement, your innumerable offers to assist in any capacity and your actual accomplishments were truly stimulating and satisfying.

The year ahead will not be without equally demanding situations as the one now closing. May we pledge together our continued support for those principles and efforts which lead to improvement in the medical profession, to betterment for the inhabitants of Oklahoma and our entire country.

George H. Garrison
President.

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PUBLIC RELATIONS REPORTER

"BEST-KEPT SECRET"

NEWSWEEK magazine recently asked "Can we finance a welfare state without tumbling into socialism? Are taxes killing our economic growth?"

The magazine's business editor makes a detailed report in answer to these questions. Excerpts from it reprinted below will have great significance for the doctor of medicine who must face the fact that socialism — not just socialized medicine — is the problem facing the U. S. today:

"Not one American in a hundred realizes that total tax collections now exceed the wartime peak. And not one in a thousand knows that hidden taxes — included in the price of everything he buys — will exceed \$700 per family this year. In fact, the best-kept secret in the country today is the size of the tax load.

"In 1945 when the United States was fighting a global war with 11 million men under arms, Federal, state and local governments collected \$52½ billions in taxes. This year they are skimming off \$55 billions — 25 per cent of the national income and more than the entire national income in 1932, 1933 or 1934.

"To a modern Rip Van Winkle, rousing from a twenty-year snooze, the sight of the Federal government alone spending \$43½ billions a year would be unbelievable. In 1929 the total U. S. budget was about three billion dollars. The government spent an amount less than two-thirds of the personal income of the residents of California. Last year Federal expenditures were roughly equal to the entire income of all persons west of the Mississippi."

BRITISH SICKNESS JUMPS

A British government survey has disclosed that illness among adults in Britain increased 8 per cent in the first year of socialized medicine. During the same period, the number of work days lost through sickness jumped 22 per cent.

BETTER THAN EVER

In a period of ten days, newspapers have carried four stories citing the better-than-ever health standards of the U. S.:

The United States at the beginning of 1950 had one physician for every 750 persons — the best showing for any nation in the world, with the exception of Palestine where a temporarily high ratio exists because of the influx of refugee doctors.

One of the brightest indications of progress in securing more physicians and better health facilities for rural areas is the recent announcement by the A.M.A. that community health councils in the nation have increased from 82 to nearly 300 in the last two years.

In the past 15 years, the infant death rate of the U. S. has declined from 56 per 1000 live births to 32. This includes deaths from birth to one year. Advances in methods of treating pneumonia and infant diarrhea — the two diseases which are the major causes of deaths of babies over one month and under one year — are reflected in the lowered death rate.

The Federal Security Agency has announced a new high of 71 years in the life expectancy of white women.

KEEP YOUR PATIENTS POSTED

A strategically placed bulletin board in the physician's waiting room serves the double purpose of telling your message to the patient and providing welcome diversion while he waits. Hanging a bulletin board is as easy as hanging a picture. There's a wide variety of material for posting — information on compulsory health insurance, newspaper clippings about England's costly National Health Insurance, health items of general interest. Don't forget cartoons. And don't forget to change the material often.

"The best thing about a bulletin board," says one physician, "is that it makes patients ask questions. It gives me the conversational opening I need to explain more fully where I stand on compulsory health insurance — and why."

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SCIENTIFIC EXHIBITS, MOVIES, TELEVISION OUTSTANDING FEATURES OF ANNUAL MEETING

Return of scientific exhibits for the first time since before the war, and the inauguration of movies and television as outstanding features promise to make the 57th Annual Meeting of the Oklahoma State Medical Association one of the most successful. Slated for June 5, 6, and 7, with the House of Delegates scheduled for June 4, the meeting will be held in Oklahoma City's Municipal Auditorium.

All general sessions will be held in the large Zebra Room in the basement of the auditorium and scientific exhibits, section meetings, and technical exhibits will also be in the Zebra Room. The President's Inaugural Dinner Dance, however, will be held in the Persian Room of the Skirvin Tower Hotel. No hotel will be designated as headquarters for the meeting but the housing committee has advised that adequate hotel facilities will be available in the leading downtown hotels for all physicians and their families.

Eleven well known specialists have been secured as guest speakers by the scientific work committee. They include: Eye, Albert Lemoine, M.D., Kansas City, Mo.; ENT, John S. Knight, M.D., Kansas City, Mo.; Urology, Vincent J. O'Connor, M.D., Chicago, Ill.; Dermatology, R. R. Kierland, M.D., Rochester, Minn.; Radiology, John S. Bonslog, M.D., Denver, Colo.; Pediatrics, Harry Shwachman, M.D., Boston, Mass.; General Medi-

cine, Edgar Hall, M.D., New Orleans, La.; Psychiatry, Kenneth Appel, M.D., Philadelphia, Pa.; General Surgery, Joe Gale, M.D., Madison, Wisconsin; Ob.-Gyn., Curtis Tyrone, M.D., New Orleans, La.; and Orthopedics, Atha Thomas, M.D., Denver, Colorado.

Roundtable luncheons will be held at noon each day. Guest speakers will participate in the discussions.

Television and movies have been scheduled in medicine and surgery from 9:00 A.M. to 12:00 Noon Monday, June 5, and Tuesday, June 6; and in medicine at 3:00 P.M., Wednesday, June 7. A public television broadcast on poliomyelitis will be held from 2:00 P.M. to 3:00 P.M. Wednesday, and will be televised to doctors in attendance at the meeting in the Zebra Room.

Members of the Auxiliary have planned an extensive program designed to be interesting, entertaining and instructive for wives of physicians attending. The complete Auxiliary program appears on Page 250 of the May issue.

Additional information and the complete program has been mailed to all members of the O.S.M.A. and can also be found on Page 238 of the May Journal.

All physicians attending are urged to visit the commercial exhibits during the meeting. Exhibits will be displayed each day from 8:30 A.M. to 5:00 P.M.

YOUR CONVENTION AT A GLANCE

SUNDAY, JUNE 4, 1950

- 10:00 A.M.—Council Meeting, East Room, Biltmore Hotel
- 2:00 P.M.—House of Delegates, Hall of Mirrors, Municipal Auditorium
- 7:00 P.M.—House of Delegates, Hall of Mirrors, Municipal Auditorium
- 5:30 P.M.—O. U. Alumni Fellowship Hour, Persian Room, Skirvin Tower Hotel

MONDAY, JUNE 5, 1950

- 8:00 A.M.—General Registration opens, Zebra Room (basement) Municipal Auditorium
- 9:00 A.M.—General Sessions, Zebra Room, Municipal Auditorium
- 12:00 Noon—Roundtable Luncheon Y.W.C.A.
- 2:00 P.M.—Section Meetings, Zebra Room, Municipal Auditorium
- 2:00 P.M.—General Sessions, Zebra Room, Municipal Auditorium
- 6:00 P.M.—Class of 1935, Reunion, Beacon Club

TUESDAY, JUNE 6, 1950

- 8:00 A.M.—Registration, Zebra Room (basement) Municipal Auditorium
- 9:00 A.M.—General Sessions, Zebra Room, Municipal Auditorium
- 12:00 Noon—Roundtable Luncheon Y.W.C.A.
- 2:00 P.M.—Section Meetings, Zebra Room, Municipal Auditorium
- 2:00 P.M.—General Sessions, Zebra Room, Municipal Auditorium
- 8:00 P.M.—President's Annual Dinner Dance, Persian Room, Skirvin Tower Hotel
- 10:00 P.M.—Dancing, Persian Room, Skirvin Tower Hotel

WEDNESDAY, JUNE 7, 1950

- 8:00 A.M.—Registration, Zebra Room (basement) Municipal Auditorium
- 9:00 A.M.—Section Meetings, Zebra Room, Municipal Auditorium
- 12:00 Noon—Roundtable Luncheon Y.W.C.A.
- 2:00 P.M.—General Sessions, Zebra Room, Municipal Auditorium
- 5:00 P.M.—Convention closes.

SUNDAY, JUNE 4, 1950

ANNUAL MEETING OF THE ALUMNI ASSOCIATION OF THE UNIVERSITY OF
OKLAHOMA SCHOOL OF MEDICINE

SKIRVIN TOWER HOTEL, PERSIAN ROOM, OKLAHOMA CITY, OKLA.

ROBERT B. GIBSON, PRESIDENT, PRESIDING

5:30 P.M. Reunion and Fellowship Hour — Refreshments

(For all doctors and wives attending the Oklahoma State Medical Association Annual Meeting) — The official 10 year class reunions will meet here also as follows:

Class of 1910 — Chairman, Eva Wells, M.D., Med. Arts Building, Oklahoma City

Class of 1920 — Chairman, Carl Brundage, M.D., 1200 No. Walker, Oklahoma City

Class of 1930 — Chairman, Bert Mulvey, M.D., 1200 No. Walker, Oklahoma City

Class of 1940 — Chairman, W. T. McCollum, M.D., 415 N. W. 12th, Oklahoma City

Class of 1950 — Chairman, Robert Hargrove, M.D., Medical School, Oklahoma City

6:30 P.M. (1) Same place — Persian Room, Skirvin Tower Hotel. All doctors and wives invited — the seniors will be given the Hippocratic Oath Sponsio Academica by Robert B. Gibson, M.D., Ponca City, Oklahoma

(2) Welcome — by Mark R. Everett, Ph.D., Dean

(3) Honoring of Professors Emeritus:
George A. LaMotte, M.D., Medicine
by Phil McNeil, M.D.
C. J. Fishman, M.D., Medicine
by R. Q. Goodwin, M.D.

(4) The Oklahoma Medical Research Foundation Report, J. G. Puterbaugh, President, McAlester, Oklahoma.

(5) Election of Officers.

ANNUAL MEETING GUEST SPEAKERS AND SPONSORS

*Guest**Sponsor*

Eye.....	Albert Lemoine, M.D., Kansas City, Mo.	E. N. Robertson, M.D., Okla. City
ENT.....	John S. Knight, M.D., Kansas City, Mo.	L. C. McHenry, M.D., Okla. City
Urology.....	Vincent J. O'Connor, M.D., Chicago, Ill.	Robert H. Akin, M.D., Okla. City
Dermatology.....	R. R. Kierland, M.D., Rochester, Minn.	W. G. McCreight, M.D., Okla. City
Radiology.....	John S. Bouslog, M.D., Denver, Colo.	John Danstrom, M.D., Okla. City
Pediatrics.....	Harry Shwachman, M.D., Boston, Mass.	Charles E. Green, M.D., Lawton
General Medicine.....	Edgar Hull, M.D., New Orleans, La.	Robert Bayley, M.D., Okla. City
Psychiatry.....	Kenneth Appel, M.D., Philadelphia, Pa.	C. F. Obermann, M.D., Okla. City
General Surgery.....	Joe Gale, M.D., Madison, Wisconsin	C. R. Rountree, M.D., Okla. City
Ob.-Gyn.....	Curtis Tyrone, M.D., New Orleans, La.	J. M. Parrish, Jr., M.D., Okla. City
Orthopedics.....	Atha Thomas, M.D., Denver, Colo.	James C. Amspacher, Okla. City

OBITUARIES

H. M. REEDER, M.D.

1876-1950

H. M. Reeder, M.D., Konawa, died March 27 in an Ada hospital after a long illness.

Doctor Reeder was born in Roanoke County, Virginia in 1876. His childhood was spent in Lexington, Mo. After graduating from the University Medical College, Kansas City, Mo., Doctor Reeder began practicing in Asher 42 years ago before he came to Konawa in 1928. He also practiced in Shawnee, Grandfield and Webb City. He served with the medical corps as a first lieutenant during World War I.

He was a life member of the Oklahoma State Medical Association and a past president of the Seminole County Society. Doctor Reeder was a member of the Konawa Methodist Church, the Masonic Lodge and the American Legion.

Survivors include the widow of the home address, three daughters, one son, a brother, two sisters, and two grandchildren.

CHARLES G. PRICE, M.D.

1882-1950

Charles G. Price, M.D., longtime Durant physician, died April 7. He had been ill two weeks.

Doctor Price was born in Cherokee County, Georgia, May 19, 1882. He attended Georgia Tech, Atlanta, and received his medical degree at Georgia Eclectic School of Medicine in 1904. He came to Indian Territory that year and began the practice of medicine. He moved to Texas in 1912 and moved to Durant in 1924.

A veteran of World War I, he was a member of the First Christian Church, the Masonic lodge Mystic Shrine, the Odd Fellows, and the American Legion. He was past president of the Bryan County Medical Society and was secretary at the time of his death.

Survivors include the widow, one daughter, one brother and two sisters.

L. R. PACE, M.D.

1888-1950

L. R. Pace, M.D., pioneer Seminole physician, died April 3 in an Oklahoma City Hospital. Doctor Pace was born March 28, 1888. He was graduated from the University of Louisville in 1909. He had been a partner in the Pace-Chambers clinic in Seminole for many years.

C. M. MAUPIN, M.D.

1874-1950

C. M. Maupin M.D., died March 31 after a short illness.

Doctor Maupin was born August 29, 1874 at Crown City, Ohio. He was graduated from Crown City schools and received his M.D. degree from Barnes Medical College, St. Louis, Mo., March 17, 1896. He returned to his home town and practiced medicine until the following September when he again entered Barnes college for post graduate work. In 1898 he moved to Papinsville, Mo. to practice medicine. At the opening of the Kiowa-Comanche country in August, 1901, Dr. Maupin came to Lawton. The family moved to Waurika in February, 1905.

Doctor Maupin was local surgeon for the Rock Island railway for the next quarter century. He was also a member of the Masonic and Odd Fellows lodges, the Board of Stewards of the Methodist church, and the Waurika Lions club.

In September, 1948, he was awarded an O.S.M.A. 50 Year Pin. The award was made the day Dr. and Mrs. Maupin celebrated their golden wedding anniversary.

Survivors include the widow of the home, one daughter, Miss Nora Maupin, and one son, Lt. Col. Clinton S. Maupin. Three sisters also survive.

RESOLUTION

We, the members of Garvin County Medical Society, mourn the loss of Dr. R. M. Alexander, of Paoli, Oklahoma.

He served beyond fifty years as a practitioner of medicine, and was honored by our State Medical Association last year for this achievement. He proudly bore that honor in his last year of life — but his greatest pride was in being a physician, counselor and friend to the many good people of his community. Through the years, no doctor ever fulfilled his obligation of service to his patients more conscientiously than did Doctor Alexander. In his last days he knew that he had, for them, fought a good fight, and had kept the faith throughout his years as a doctor.

It is requested that copy of this instrument be sent to Doctor Alexander's family, the State Medical Association, local newspapers and one kept on file in the records of the Garvin County Medical Society.

Respectfully submitted,

s/ Ray H. Lindsay, M.D.

J. N. Byrd, Jr., M.D.

Committee for Garvin County Medical Society

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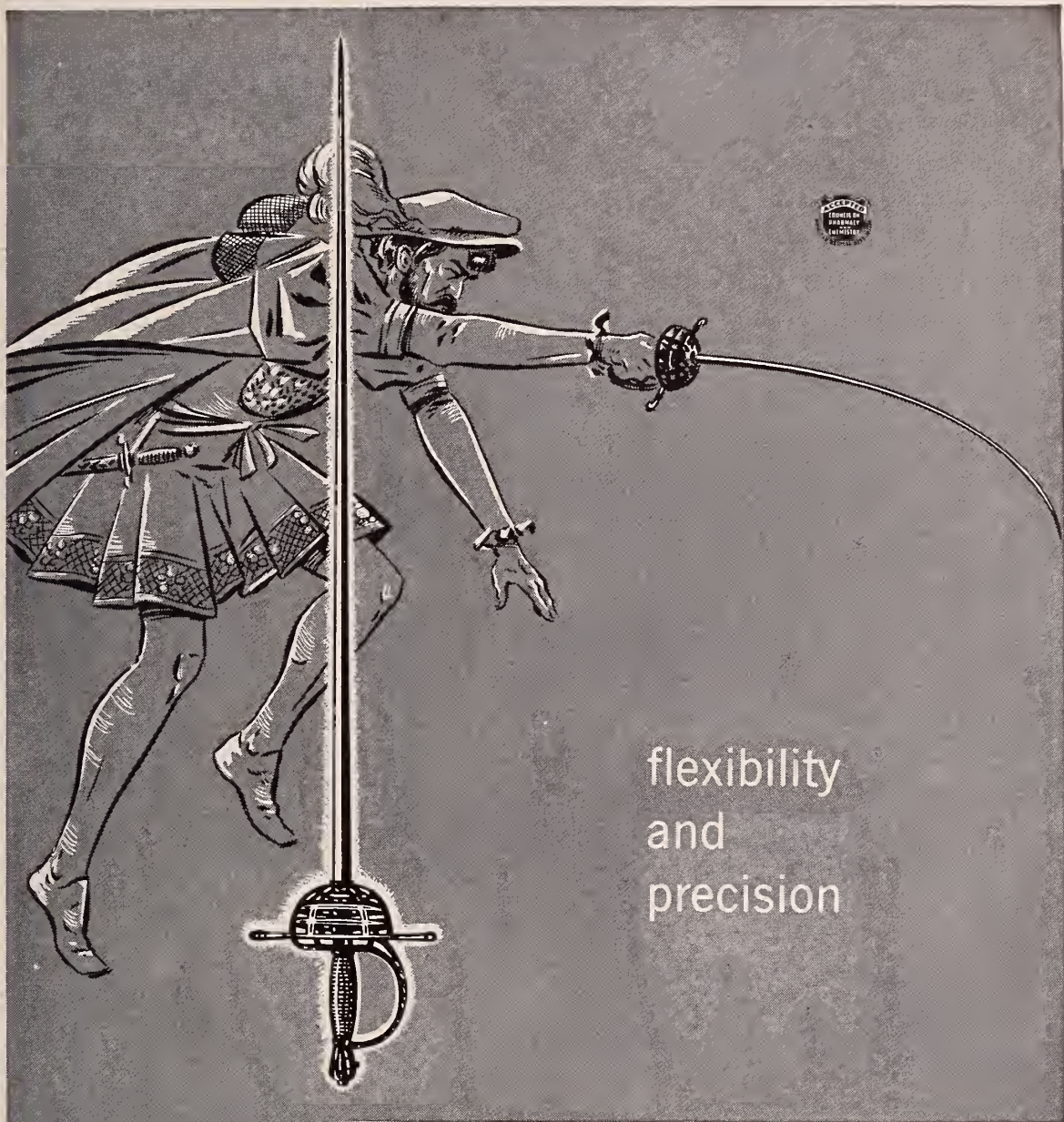
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HAVE YOU HEARD?

Sam McKeel, M.D., Ada, was guest speaker at a recent meeting of the Sallisaw Lions Club.

Paul Kernick, M.D., Holdenville, discussed amateur radio operation at a meeting of the Wewoka Rotary Club.

B. B. Coker, M.D., Durant, recently took a specialized naval medical course at the U. S. Navy hospital in Bethesda, Maryland. Doctor Coker holds the rank of commander in the reserves.

Glen W. McDonald, M.D., Pawhuska, spoke on Socialized Medicine at a Business and Professional Women's Club in that city.

Everett G. King, M.D., Duncan, will leave the first of this month for active duty as a colonel in the army medical corps.

Kenneth Roberts, M.D., formerly of Stigler, has moved to Casper, Wyo.

Wallace Byrd, M.D., has opened offices in Coalgate. He formerly practiced in Ada.

V. R. Payne, M.D., has moved his offices into the new hospital building at Cheyenne.

J. F. York, M.D., Madill, has been named head of the crippled children's committee of the Madill Rotary Club.

A. Ray Wiley, M.D., Tulsa, discussed socialized medicine at a recent meeting of the Tulsa Rotary Club.

N. H. Cooper, M.D., Ponca City, used "Will Compulsory Insurance Solve Our Health Problems?" as his topic when he spoke to the World Affairs group of Ponca City Woman's Club.

S. D. Revere, M.D., Chickasha, spoke on "Compulsory Health Insurance" at the 1925 Study Club.

H. C. Weber, M.D., Bartlesville, was recently the subject of a feature article in his home town paper entitled "Dr. Weber 'About Ready' to Retire — Again".

Hugh Monroe, M.D., Pauls Valley, had been elected to head the Pauls Valley Rotary Club for 1950-51.

T. C. Glasscock, M.D., Ponca City, attended a medical meeting in Chicago recently.

E. W. Mabry, M.D., Altus, attended a meeting of railroad surgeons in Chicago recently.

Boyd Savers, M.D., formerly of Heavener, has moved to Stigler.

C. E. Smith, M.D., *I. W. Bollinger, M.D.*, and *T. A. Trow, M.D.*, all of Henryetta, have announced a three-way partnership.

O. H. Cowart, M.D., Bristow, has been named surgeon on the Bristow Veterans of Foreign Wars post.

O. L. Parsons, M.D., Lawton, will represent the 11-county Black Beaver Council of the Boy Scouts council meeting at Philadelphia this summer.

Clinton Gallaher, M.D., Shawnee, has been elected president of the Shawnee Rotary club.

E. A. Allgood, M.D., Snyder, spoke on "The Activities of the Medical Association" at a meeting of the Rotary club.

G. L. Berry, M.D., Lawton, attended a special clinic on refraction and other subjects related to eye examination and treatment at Roanoke, Virginia.

E. M. Farris, M.D., Oklahoma City, spoke on intestinal obstruction before a meeting of the Veterans Administration Hospital staff in Muskogee.

McLain Rogers, M.D., Clinton, outgoing mayor of that city, was honored at a dinner recently by all city employees and their families.

L. C. Veazey, M.D., and Mrs. Veazey, Ardmore, have returned from a two months cruise to Hawaii.

Charles Brighton, M.D., Tulsa, spoke on cerebral palsy at a meeting of the Ponca City American Business Club.

D. F. Coldiron, M.D., Perry, was guest speaker at a meeting of the Business and Professional Women's club there.

J. M. Allgood, M.D., Altus, attended a post-graduate course in Miami Beach, Florida, recently, and also spent several days in Cuba.

Fiais Ewing, M.D., Muskogee, recently appeared on a radio broadcast where he spoke on "A Fight for 67,000 Lives" in behalf of the current cancer campaign.

John Jacob, M.D., Wanika, has been appointed County Superintendent of Health of Jefferson County.

Earl D. McBride, M.D., Oklahoma City, was guest lecturer at the University of Kansas Medical Center on the program of their refresher course on April 12.

Howard B. Shorbe, M.D., and Mrs. Shorbe, and Dr. and Mrs. Earl D. McBride attended the annual meeting of the Association of Bone and Joint Surgeons in Lincoln, Nebraska April 14 and 15. Doctor McBride is president of that organization.



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CALCIUM	1.12 Gm.	NIACIN	6.8 mg.
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FOR SALE: One Maclure rectal and proctoscopic table. One proctoscope and one tubal insufflation set. One Admiral surgical cautery with diathermy. One desk and chair. Also obs.-gyn. books. Write Key W., care of the Journal.

FOR SALE: 110 volt x-ray generator, tube and control. \$125.00. Write Key E, care of the Journal.

FOR SALE: I am retiring after 50 years of activity in surgery and general practice and desire a successor eligible to medical society membership. Office equipment with x-ray, diathermy and excellent laboratory facilities. Full time nurse-technician employed. Rent reasonable. College town of 25,000 population. Modern standardized hospital and admission to staff easily arranged. A splendid nucleus for a clinic if desired. Terms made agreeable and will remain for introduction. Write Key B, care of the Journal.

FOR SALE: X-ray 25 MA. Profex with upright fluoroscope, cassettes, and darkroom equipment. Used one year. \$1100. Write Key L, care of the Journal.

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ANNOUNCEMENTS

OKLAHOMA STATE MEDICAL ASSOCIATION. June 5, 6, 7, 1950. Municipal Auditorium. Oklahoma City. House of Delegates June 4.

AMERICAN MEDICAL ASSOCIATION. June 26-30. San Francisco.

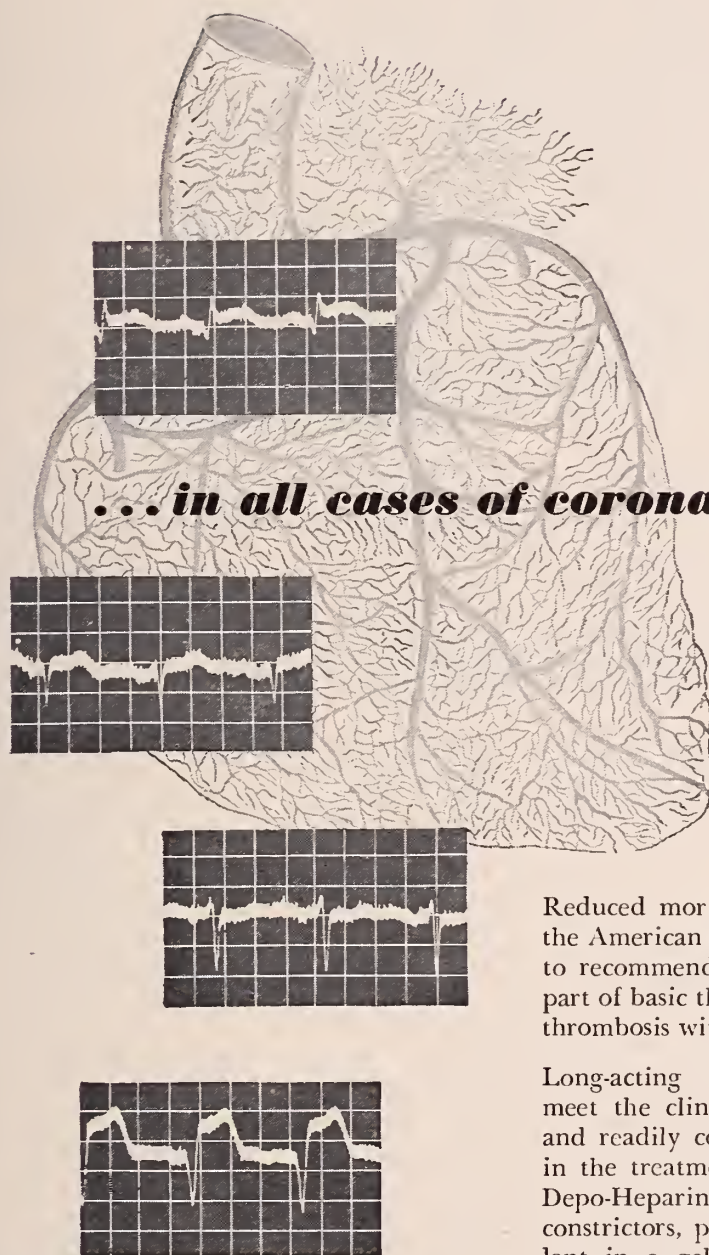
OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1-2. Oklahoma City.

A.M.A. GOLF TOURNAMENT. The American Golfing Association will hold its 34th tournament Monday, June 26, the opening day of the 1950 A.M.A. Annual Session.

EXAMINATION, STATE BOARD OF MEDICAL EXAMINERS. June 7 and 8, 1950, Auditorium, University of Oklahoma School of Medicine. All applications should be made to the Secretary of the Board, 813 Braniff Building, Oklahoma City. \$25.00 fee, no checks will be accepted. Diploma and basic science certificate required.

COURSE IN CYTOLOGIC DIAGNOSIS OF CANCER. A course in exfoliative cytology for the diagnosis of cancer by the smear technique will be offered at the University of Colorado School of Medicine for pathologists and qualified physicians. The course will meet daily for two weeks, beginning July 24 and ending August 5, 1950. Material from the different systems of the body will be available for study with correlation of clinical, x-ray, and pathologic finds. Members of the staff of the Medical School and associated hospitals will cooperate in the conduction of the course. Tuition \$100. Physicians interested should write Walter T. Wike, M.D., Director of Laboratory of Exfoliative Cytology, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver 7, Colorado.

AMERICAN COLLEGE OF CHEST PHYSICIANS. Sixteenth annual meeting will be held at the St. Francis Hotel, San Francisco, June 22 - 25, 1950. Robert M. Shepard, M.D., Tulsa, serves as the Governor of the College for Oklahoma.



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Reduced mortality and morbidity have led the American Heart Association study group to recommend the use of anticoagulants as part of basic therapy "in all cases of coronary thrombosis with myocardial infarction."¹

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¹ Wright, et al: *Am. Heart J.* 36, 801 (Dec.) 1948.

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MEDICAL SOCIETIES AROUND THE STATE

Kiowa-Washita

Dinner at the Hobart Country Club with the Auxiliary as hostesses climaxed Doctor's Day for the Kiowa-Washita County Medical Society. Approximately 30 physicians and their wives attended the dinner.

Logan

Doctor's Day observance in Logan County included presenting red carnations to all physicians in Guthrie, planting of a mimosa tree as a memorial to doctors who have died, and a buffet supper for doctors and their wives held at the home of Dr. and Mrs. William C. Miller.

Kay-Noble

Paul Vickers, M.D., University of Oklahoma School of Medicine, was guest speaker when the Kay-Noble Society met in Perry recently. Doctor Vickers spoke on "Benign Lesions of the Anus and Rectum".

Pottawatomie

Honoring members of the Pottawatomie County Medical Society on Doctor's Day, the Auxiliary entertained their husbands with a buffet supper at the home of Dr. and Mrs. Horton Hughes.

Greer

Druggists and lawyers were guests of the Greer County Medical Society when Executive Secretary Dick Graham spoke on socialized medicine at a recent meeting.

Osage

Grider Penick, M.D., Oklahoma City, was principal speaker at the April meeting of the Osage County Medical Society in Fairfax, recently. The group also toured the Fairfax hospital and held a business meeting there.

Stephens

Following a dinner for the Stephens County Medical Society and Auxiliary, in observance of Doctor's Day, the group participated in a song festival and musical program at the home of Dr. and Mrs. C. N. Talley.

Alfalfa

E. E. Fair, M.D., and W. T. McCollum, M.D., Oklahoma City, were guest speakers at the Alfalfa-Woods County Medical Society. Doctors from Alva, Cherokee and Waynoka attended the meeting.

Northwestern

Approximately 75 physicians, dentists, technicians and nurses attended the Northwestern Counties Medical Society meeting April 13 at the Community Hospital in Mooreland. C. E. Williams, M.D., presented a recording of an address given by Doctor Sullivan, University of Toronto, Canada, at the post graduate course held in Los Angeles in January. Others on the program were Cleve Beller, M.D., who spoke on "Hormone Therapy", and Hubert Anderson, M.D., whose topic was "Pediatric Surgery".

Tri-County

Members of the Tri-County Medical Society and auxiliary held a dinner meeting recently. Following the dinner a program was presented by the dentists.

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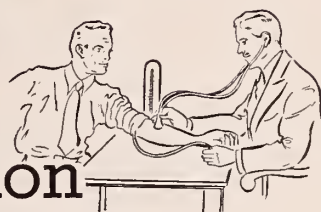
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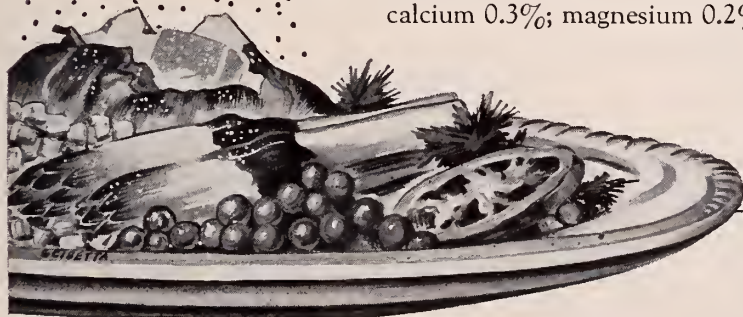
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BOOK REVIEWS

SEXUAL DEVIATIONS. Louis S. London, M.D., and Collaborators. First Edition. 702 pages. New York, The Linaere Press, Inc. 1950. Price \$10.00.

This is a new book written about a very old subject that in this enlightened age can be discussed by few people without emotional color. The problem of sexual deviations and particularly homosexuality has received so little attention on the part of the general medical profession that with the exception of a few psychiatrists, the average doctor probably has no more insight than a layman about these afflicted people.

As the Kinsey report suggests sexual practices that deviate from normal, are common. Lack of sympathetic understanding and proper advice on the part of the medical advisor may mean to a susceptible patient the difference between him being afflicted with a minor personality disturbance or a serious psychiatric aberration with all its criminal implications.

According to the authors many sexual deviates are amenable to proper psychiatric management for to quote, "Sexual deviates are not pathologic entities, but merely represent underlying neurosis of an obsessional type". In other words no one is born homosexual but has acquired an abnormal sexual pattern to a pathological degree from environmental forces acting in the pregenital development stage towards sexual maturity.

The book is well written and fairly easy to read except that there is a personal objection to the long case reports that seems unnecessarily repetitious. The average reader will probably skip much of the detailed analytic and expositive material. Aside from this, there is much informative material that will give the average doctor a sympathetic insight into the problem of these unfortunates.—Donald W. Branham, M.D.

CLINICAL PATHOLOGY, APPLICATION AND INTERPRETATION. Benjamin B. Wells, M.D., Ph.D. W. B. Saunders Company. 1950.

In our present day complex type of medical practice and the voluminous and complex nature of laboratory procedures, the physician is constantly confronted with the task of selection of laboratory procedures that will be of the greatest value in the diagnosis, prognosis and treatment of diseases. To select the best tests requires some general knowledge of the method, its limitations, and interpretations.

Doctor Wells, in his introductory remarks, outlined the purpose of the book when he stated: "The prac-

itioner must know at least three things about every laboratory procedure he expects to use: (1) when to use it, (2) how to interpret the results, and (3) what technical or physiologic limitations must be taken into account in the interpretation." Throughout the nine chapters Doctor Wells has adequately answered these three major questions. The problem is attacked from the standpoint of the various diseases by systems rather than a discussion of individual laboratory methods. The book is well indexed and the desired information is readily available. It is for these reasons we highly recommend this book to the busy practitioner as a guide in his numerous problems dealing with clinical pathology.—W. F. Keller, M.D.

PRIMER OF ALLERGY. Originally by Warren T. Vaughn, M.D., Third Edition Revised by J. Harvey Black, M.D., Dallas, Texas. St. Louis, Missouri. The C. V. Mosby Company. 175 pages with 25 illustrations. \$3.50.

If satisfactory results are to be experienced in the management of allergic disease, the education of the patient assumes paramount importance, in almost every case. It was with this knowledge that Doctor Vaughn was originally prompted to publish the Primer of Allergy in 1939. The value and popularity of this book is further evidenced by the now available Third Edition and its numerous reprints during the interim between 1939 and 1950.

Unless other means are available for transmitting necessary information to the patient with allergic disease, this book should be recommended for study to all intelligent patients. It is written in a manner that can be adjudged a reasonably good bedtime story. The knowledge and information contained therein is recognized and accepted by all competent allergists.

Further, for the student being initially exposed to the theory and practice of allergy, it is a highly helpful publication giving insight where a scientific explanation might prove initially bewildering.

Doctor Black's revision of the present edition has made what changes were needed by advances in knowledge and experience of these two outstanding allergists, this book can be recommended not only to the general practitioner with a limited experience in the field of allergy, but also to the specialist.

Each of the 11 chapters are packed with readable, understandable information with Chapters X and XI emphasizing both success and failure in allergic management.—George S. Bozalis, M.D.

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WILLIS J. POTTS, M.D., CHICAGO	MALIGNANCIES IN CHILDREN
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GRANTLEY W. TAYLOR, M.D., BOSTON	BREAST AND NECK
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MEDICAL

DIRECT OPERATIVE REMOVAL OF BENIGN MIXED TUMORS OF ANLAGE ORIGIN IN THE PARATID REGION. James Barrett Brown, Frank McDowell and Minot P. Fryer. S. G. and O. 90:3:257-269 (March) 1950.

It has seemed to me that there has been a state of confusion in the classification and the discussion of parotid region tumors. This article offers a sane and sensible classification of these tumors, together with proven methods of therapy for each type.

Secondly it goes into considerable detail with pictures and diagrams to show a direct operative approach to benign mixed tumors of anlage origin in the parotid area by elevation of a large facial flap and the direct removal of the tumor by careful dissection without damage to the seventh nerve.—John F. Burton, M.D.

THE VALUE OF MINIATURE RADIOGRAPHY IN THE DETECTION OF HEART DISEASE. — Mathisen, A. K., Morris, W., and Wilson, G. B., Address: Vancouver, British Columbia. Am. Heart Jour., 39:505, April, 1950.

Whereas most mass chest X-Ray surveys are done to detect tuberculous lesions, the authors found four times as many cases of definite heart disease as tuberculous disease. Of 7,093 individuals X-Rayed, 90 (1.27 per cent) were found to have radiographic evidence of heart disease including hypertensive (42), arteriosclerotic (15), rheumatic (26), congenital (6) and thyrotoxic (1).—Robert M. Becker, M.D.

THIOCYANATE IN HYPERTENSION. — Fischmann, E. J., and Fischmann, A. Address: Auckland, New Zealand. Am. Heart Jour., 39:477, April, 1950.

In a rather ingenious method evaluating specific effectiveness of K thiocyanate therapy in hypertensive patients, the authors studied the clinical course of 50 patients following thiocyanate withdrawal. The entire course of observation covered an initial placebo period of four to twelve weeks, a thiocyanate treatment period of 12 to 156 weeks and a terminal placebo period of four to twelve weeks. Symptomatic improvement coincided with administration of the drug in 40 of those 50 patients. On thiocyanate withdrawal with placebo replacement, relapse occurred in only 11 of the 50 patients. The authors conclude "that in only 11 cases (22 per cent) are we justified in assuming a causal connection between thiocyanate treatment and symptomatic improvement."—Robert M. Becker, M.D.

URINARY CORTICOSTEROIDS IN DIABETIC ACIDOSIS. — McArthur, J. W., Sprague, R. G., Mason, H. L., Massachusetts Gen. Hosp., Boston, Mass., Jour. Clin. Endocrinology, 10:307, March, 1950.

In studying the role of adrenal cortex hyperactivity in increasing the severity of diabetes mellitus brought on by acute infections, fractures and other types of incidental stress leading to diabetic acidosis, the authors, (1) determined the rate of urinary excretion of corticosteroids, (2) correlated these with blood sugar levels and blood CO₂ content of six patients with diabetic acidosis during the first 24 hours after their admission to the hospital in diabetic acidosis, and during a 24 hour period after recovery. They "found that the rate of urinary excretion of corticosteroids during the period of acidosis was from two to eight times as rapid as it was after recovery", indicating increased adrenal cortical hyperfunction during diabetic acidosis. In one patient, the onset of acidosis was also correlated with a drop in the number of circulating blood eosinophiles, another indication of increased output of

ABSTRACTS

Compound E (cortisone) — like steroids during diabetic acidosis.—Robert M. Becker, M.D.

ABDOMINAL PAIN IN DISSECTING ANEURYSM OF THE AORTA. — Levinson, D. C., Edmeades, D. T., Griffith, G. C., Dept. of Medicine, Univ. of So. Calif., Los Angeles. *Am. Jour. Med.*, 8:474, April, 1950.

The records of 58 autopsy-proven cases of dissecting aneurysm originating in the thoracic aorta were reviewed and analyzed clinically. Fourteen patients had initial pain in their abdomen, while only three more had their initial pain in their chest. In most cases the abdominal pain was severe, usually associated with some degree of shock. Radiation of pain was most frequent to the back, also up to the chest, occasionally noted into the flanks, not as commonly as might be expected to the extremities. Six (8.6 per cent) of the patients gave no history of pain or syncope, eight patients had syncope. Dyspnea was an accompanying symptom in about half the patients. Aortic diastolic murmurs were present in 27.5 per cent, with inequalities of radial or femoral pulsations (from dissection into subclavian or femoral arteries) present in 20 per cent. In 20 per cent of cases there were neurologic symptoms due to interruption of cerebral blood flow or interference with the blood supply to the spinal cord. EKG changes were non-specific. Of the 14 cases with initial abdominal pain, eight were diagnosed ante mortem as having acute pancreatitis, mesenteric thrombosis or perforated peptic ulcer. Hypertension is usually present (in absence of shock) in patients with dissecting aneurysms of the aorta and the authors urge that the differential diagnosis of acute severe abdominal pain in a hypertensive patient should include dissecting aneurysms of the aorta.

—Robert M. Becker, M.D.

EFFECTS OF EMETINE HYDROCHLORIDE ON THE EKG IN MAN. — Kent, L., and Kingsland, R. C. *V. A. Hosp., Jefferson Barracks, Mo., Am. Heart Jour.*, 39:576, April, 1950.

After studying the cardiotoxic effects of emetine HCl in patients treated for amebiasis, the authors conclude that: (1) EKG changes of some degree were observed in all of the 26 patients, the changes most often noted consisted of lowering and inversion of T waves and lengthening of P-R interval, but no permanent cardiac damage was found, (2) the fact that transient EKG changes are produced is not considered by them as adequate reason for restricting use of this drug any more than one would restrict the use of digitalis or quinidine because of minor EKG changes, (3) they doubt the necessity of absolute bed rest during emetine therapy, feel it is all right for patient to have bathroom privileges and moderate ambulation, (4) there seems little likelihood of significant toxic reaction when emetine is administered subcutaneously or intramuscularly in doses of one grain daily for 7-10 days with a month rest period between courses.

—Robert M. Becker, M.D.

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COUNCILOR REPORTS

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 1

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor of the First District, in accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my annual report:

1. Doctor W. Jackson Sayles, Vice Councilor, of Miami, was stricken with poliomyelitis and died. Doctor John Highland of Miami was appointed to fill the vacancy. The death of Doctor Sayles was a loss to the profession as a whole and the District extends sympathy to his bereaved family.

2. In October a District meeting was held at Bartlesville with representatives from all the counties of the District. Doctor George Garrison gave a masterful address on the trends of the times. In addition, there was a scientific program, and the 50 Year Service Pins were given to Doctors J. V. Athey and O. S. Somerville.

3. On April 27, 1950, the District was well represented at the Post Graduate meeting on gastroenterology in afternoon and evening sessions in Bartlesville, and a dinner at the Hotel Burlingame.

4. With the cooperation of Blue Shield, Ottawa and Washington Counties will be given the opportunity to establish chapters in each school district, thus bringing these much needed medical services to the people in the rural areas and putting these counties on a county wide basis of coverage.

Respectfully submitted,

Forrest S. Etter, M.D.

Councilor, District No. 1

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 3

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor of the Third District, in accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my annual report:

The Third Councilor District meeting was held in Enid, on October 27th, 1949; attended by approximately thirty members of the various societies comprising the Third Councilor District. Guest speaker was Congressman George Howard Wilson, who is a member of the sub-committee of the House of Representatives studying the health bills. He had only recently returned from a survey trip to England and other foreign countries, and his remarks were of great importance to our profession, as well as the people in the United States.

Under date of October 18th, 1949, I was appointed to serve as Chairman of the Associated Diplomates of the National Board of Medical Examiners for the State of Oklahoma, which position I have accepted and will attempt to carry out the wishes of the National Board of Medical Examiners.

Monday, September 26, 1949, a very successful cancer Symposium was held at the Youngblood Hotel, with afternoon session and dinner meeting followed by roundtable discussion.

I want to thank the members of the Third Councilor District for the privilege and honor of representing them this past year; I appreciate any suggestions from them and will attempt to carry out their wishes insofar as time will permit.

Respectfully submitted,

Bruce R. Hinson, M.D.

Councilor, District No. 3

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 5

To the House of Delegates,

Oklahoma State Medical Association:

I attended all meetings of the Council and took a perhaps too active part in the discussions of the problems. At the larger part of the meetings I was accompanied by the Vice-Councilor, A. L. Johnson, M.D., of El Reno.

With the cooperation of the other doctors of the Fifth District, I organized the Fifth District Medical Society. Two district meetings were held, one at Weatherford and one at Clinton, at which excellent scientific programs were given. At both of these meetings representatives of the state office were present. At the first, George H. Garrison, M.D., President, Oklahoma State Medical Association, and at the second, Ralph McGill, M.D., President-Elect, Oklahoma State Medical Association. Work of the Council and the Executive Office was explained and commented on at these meetings.

There will be a third district meeting held at Clinton on the 25th of May, 1950, at which time a post-graduate course in dermatology will be given.

Too much praise cannot be given to Paul Lingenfelter, M.D., who is president of the District Society. Two others who deserve credit for the success of these meetings are Virginia Curtin, M.D., who is secretary of the District Society, and J. B. McGolrick, M.D., of Clinton. McGolrick is a wheelhorse of rare merit.

I met nearly all of the doctors of the district at these meetings, and attempted to keep them informed of progress at the state level. I was very remiss in that I did not attend any county medical society meetings except my own and Custer County.

Respectfully submitted,

O. C. Standifer, M.D.

Councilor, District No. 5

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 7

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor of District No. 7, I respectfully submit the following report to the House of Delegates:

This being my first year of service for Councilor District 7, I have been impressed with the extent to which the problems of medicine have increased and multiplied.

The Seventh Councilor District, made up of the following counties: Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, Seminole, have active organizations in each county, together with auxiliaries in all except Lincoln County. There are no communities in this district having a shortage of medical care from the standpoint of number of physicians and Okfuskee County is in the process of building a new county hospital which will materially aid in giving better medical care to the population of this area.

Respectfully submitted,

Ned Burleson, M.D.

Councilor, District No. 7

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 8

To the House of Delegates,

Oklahoma State Medical Association:

Gentlemen:

Since the reorganization of the councilor districts of the Oklahoma State Medical Association last year, the

Eighth Councilor District is composed of Tulsa County only. Any report of the Eighth Councilor District is then in effect a report of the activities of the Tulsa County Medical Society.

There are presently 262 active members of the Association in Tulsa County, 10 honorary members, and seven applications pending. By reason of this large membership the Society is enabled to maintain a full time Executive Secretary and staff to conduct a wide-spread program of activity formulated and directed by the membership.

The Tulsa County Medical Society maintains a sizeable medical library in connection with its Executive Offices. We find this aid to medical education invaluable and we urge larger county medical societies in the state to establish and maintain similar libraries. The Library is under the direction of a full-time librarian and an assistant, and its annual growth has been so rapid in recent years as to constitute a serious housing problem.

The Society also operates, in cooperation with the Board of County Commissioners of Tulsa County, the Tulsa County Medical Clinic, an out-patient clinic for the indigent sick and aged. Members contribute their services without fee and it is estimated this function annually saves the taxpayers in excess of \$50,000. In November, the clinic celebrated its tenth anniversary with appropriate ceremonies.

The Society owns and operates its own collection service known as The Medical Credit Bureau, offering an efficient collection service to members at cost. THE BULLETIN, official publication of the Society, has been expanded to 32 pages during the past year. It is sent complimentary to 1,000 doctors of Eastern Oklahoma. The Society jointly sponsors with the Tulsa County Chapter of the American Red Cross, the Tulsa County Red Cross Blood Donor Center. This program for the collection of whole blood for gratis transfusions to hospital patients of Tulsa County, we consider to be one of our best achievements.

A total of 17 meetings have been held during the year, nine featuring nationally known guest speakers, the remaining eight being presentations by members of the Tulsa County Medical Society. Last year a postgraduate study course was also conducted in the basic sciences with members of the faculty of the University of Oklahoma as instructors.

Particular attention has been given to a public relations program by a seven man Public Policy Committee. This group has been responsible for matters relating to the campaign against socialized medicine and the improvement of doctor-patient relationships. We are pleased that our program has been commended by officials of the American Medical Association. The program emphasizes public speaking engagements; radio, press, and television contacts; visual education; school health and instruction activities; legislation; and allied professional group cooperation.

Other activities of the Society relate to matters of malpractice and health and accident group insurance, civic relations, public health affairs, cancer education, ethics and grievances, industrial relations, physician services, and social events. The Ladies Auxiliary to the Tulsa County Medical Society is an active and interested group which we consider a valuable adjunct to our own program.

I am pleased to report the Eighth Councilor District has a 100 per cent payment of the American Medical Association special assessment of \$25.00 last year, and that it has already gone on record as favoring the assessment of AMA dues for 1950. The District is pleased with the activities of the Oklahoma State Med-

ical Association and respectfully offers its cooperation to all activities designed to increase the benefits of medicine to the people of the State of Oklahoma.

Respectfully submitted,
Maurice J. Searle, M.D.
Councilor, District No. 8

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 9

To the House of Delegates,
Oklahoma State Medical Association:

I hereby submit my report as Councilor of District No. 9. This district is composed of Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, and Wagoner Counties. There is no organized County Medical Society in Adair County.

Cherokee County Medical Society is organized and meets on the first Tuesday of each month. This County Medical Society has seven members. P. H. Medearis, M.D., is president; R. K. McIntosh, M.D., is secretary.

Okmulgee County Medical Society meets on the second Mondays, alternating in Okemah, Henryetta and Okmulgee. M. L. Peter, M.D., of Okmulgee is president; S. B. Leslie, M.D., of Okmulgee is secretary.

The Muskogee, Sequoyah, Wagoner County Medical Society meets on the second and fourth Mondays of each month. C. L. Oglesbee, M.D., of Muskogee is president. Virgil D. Matthews, M.D., of Muskogee is secretary. During this past year, McIntosh County Medical Society has petitioned the House of Delegates to be amalgamated with the Muskogee, Sequoyah, Wagoner County Medical Society, and this has met the approval of both of these County Medical Societies. This petition is to be considered at this session of the House of Delegates and it is my recommendation that it be granted. A name will be suggested for this County Medical Society which both myself and the Vice-Councilor of this district recommend.

We have held two district meetings in District meetings in District No. 9, during 1949. One at Okmulgee on April 11, 1949, when Thomas G. Orr, M.D., and Don Carlos Peet, M.D., Kansas City, furnished a most excellent program. The second meeting was held in Muskogee on July 20, 1949, at which time seven members of the Oklahoma State Medical Association were signally honored. W. A. Tolleson, M.D., of Eufaula, received an honorary membership. Doctors W. R. Joblin, J. L. Blakemore, L. D. Bruton, J. Hutchings White and M. K. Thompson, of Muskogee, received Fifty Year Pins. Doctors W. R. Joblin, J. L. Blakemore of Muskogee and Raymond W. Stoner of Checotah, received a life membership. Many of the State officers were present at this meeting.

I have fortunately been able to attend most of the Council meetings held during 1949, as has also our Vice-Councilor, F. R. First, Jr., M.D., Checotah. It has indeed been a great pleasure to me personally to attend these Council meetings and to assist in a small way in its functioning. I believe as a whole, there is very good cooperation among the membership of the Oklahoma State Medical Association in District No. 9.

Respectfully submitted,
Shade D. Neely, M.D.
Councilor, District No. 9

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 10

To the House of Delegates,
Oklahoma State Medical Association:

The 10th Councilor District has not been too active during the past year; however, a number of things have happened which would indicate that the members composing this Councilor District have done their part.

The Tenth Councilor District had a meeting in McAlester in October and the program was presented for the most part by Earle H. Hunt, M.D., President-Elect, Arkansas State Medical Association, and C. R. Rountree, M.D., representing the President of the Oklahoma State Medical Association. Problems that were discussed at that particular meeting consisted chiefly of subjects that were brought up at the American Medical Association at a recent meeting. There was a good attendance at this meeting and all members appeared to be interested in the program that was presented.

This Councilor attended a picnic dinner that was sponsored in Holdenville June 23rd by members of the Hughes County Medical Society. The meeting was held at the golf course and was a very enjoyable affair. Membership of the Tenth Councilor District has had occasion to participate and to take part in the Post Graduate course that has recently been conducted by Doctor Becker. This was indeed one of the best courses that has been sponsored by the Oklahoma State Medical Association.

Since the amalgamation of the LeFlore-Haskell County Medical Societies the meetings have taken on new life and have been very interesting during the past year.

There have been a number of local medical meetings in McAlester during the past year sponsored by the Pittsburg County Medical Society. Among those meetings that have been held in McAlester during the past year was the American Cancer Society Post Graduate course for instruction which met jointly with the Pittsburg County Medical Society at the September meeting date. At the November meeting of the Pittsburg County Medical Society, this Society was host to Dr. F. M. Lingentelter, Dr. Lynn H. Harrison and Dr. Carl L. Brundage who had come to McAlester to hold the Mobile Cancer Detection Clinic.

Latimer County has no active medical society but the physicians meet with the Pittsburg County Medical Society. The Hughes County Medical Society which is also a part of the Tenth Councilor District, has been holding meetings recently jointly with the Seminole County Medical Society.

S. C. Dean, M.D., Howe, and E. L. Collins, M.D., Panama (LeFlore County) were presented 50 Year Pins on July 10 at ceremonies conducted at their respective home town high school auditoriums. December 12th the LeFlore County Medical Society elected officers for the year, 1950. On April 12th the LeFlore County Medical Society endorsed the Blue Cross Plan and elected staff members for the new recently completed LeFlore County Memorial Hospital.

The Tenth Councilor District is grateful to E. H. Shuller, M.D., Vice-Councilor for his loyal cooperation and helpful suggestions during the past year.

Respectfully submitted,
Earl M. Woodson, M.D.
Councilor, District No. 10

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 11

To the House of Delegates,
Oklahoma State Medical Association:

In accordance with the by-laws of the Oklahoma State Medical Association I respectfully submit, herewith, the report of the Eleventh Councilor District.

I wish to take this opportunity to call to the attention of this House of Delegates, since my last report to you, that one of the organizers of this State Association, Dr. J. S. Fulton, Atoka, Oklahoma, has been called to reap his final reward. Dr. Fulton had prac-

ticed ethical, inspiring, medicine in this state for more than fifty years. He had served this Association as president, and had served as Councilor for the old tenth district for many years. His loss is keenly felt in this district.

The annual meeting of the Eleventh Councilor District was held at the Willow Springs Resort on the banks of Lake Texhoma. Your Councilor felt it would be a fine gesture to invite members of the local allied professions to this meeting. The invitation was extended and most cordially accepted by all.

I wish to assure the members in this district it is a genuine pleasure to serve you as Councilor.

Respectfully submitted,
W. K. Haynie, M.D.
Councilor, District No. 11

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 12

To the House of Delegates,
Oklahoma State Medical Association:

A Twelfth Councilor District Meeting was held in September, 1949, at the Youth's Camp at Lake Murray. Approximately 75 doctors and their wives were present. President George Garrison, M.D., and Mrs. George Garrison of Oklahoma City were present. Also Mr. Dick Graham, Executive Secretary of the Association was present.

The meeting was preceded by boat rides on Lake Murray. The dinner was given complimentary by the Carter County Medical Society of which Dr. Roger Reid of Ardmore was President and Dr. Royce Means of Marietta was Secretary.

Doctors and their wives were present from Ada, Pauls Valley, Wynnewood, Sulphur, Marietta, Madill and Ardmore.

This was a most successful meeting and other meetings have been planned for the future.

Respectfully submitted,
J. Hobson Veazey, M.D.
Councilor, District No. 12

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 14

To the House of Delegates,
Oklahoma State Medical Association:

As Councilor of the 14th District of the Oklahoma State Medical Association and in compliance with the by-laws of the Association, I herewith submit my annual report.

During the Annual Session of 1949 re-districting was accomplished and our District 14, which was formerly a part of District 2, lost Beckham, Custer and Roger Mills Counties. So that now our district has only six counties as follows: Greer, Harmon, Jackson, Kiowa, Tillman and Washita.

In these six counties there are the following chartered societies: Greer, Jackson, Tillman County Societies and Kiowa-Washita District Society. Under the State Association by-laws Harmon County has insufficient members to maintain a county society and the members of that county belong to the societies of adjacent counties.

The past year has been an active one for our district. All societies have been active and the auxiliaries have played a major role in the increased activity and interest in those counties where the auxiliary has been organized.

One of the highlights of the district was the joint Councilor District, Kiowa-Washita meeting held at Cordell November 10, 1949, at which members of the allied professions were guests. George H. Garrison, M.D., was the guest speaker and charters were presented to rep-

representatives of all the county societies. J. P. Jones, M.D., of Dill and A. H. Hathaway, M.D., of Mountain View were presented 50 Year Pins. Again the auxiliary performed with the table arrangements, decorations, music and all the essentials of making the banquet a success.

On April 10, 1950 at Mangum, Oklahoma, Mrs. Livingston and I were guests of the Greer County Medical Society and their Auxiliary at a similar meeting at which allied professions were entertained. At this meeting the lawyers were also guests. Dick Graham spoke on socialized medicine and an excellent roundtable discussion followed. This was another excellent meeting and David Fried, M.D., and Mrs. J. B. Hollis are to be congratulated. I am constantly amazed at the fine results accomplished where the auxiliary has been active.

I have enjoyed serving this year as your Councilor. Your Vice-Councilor, J. B. Hollis, M.D., or myself

have been present at practically every meeting of the Council and have attempted to attend District County Society meetings where notified.

Our State Association has been extremely fortunate in having George Garrison, M.D., as President during a trying year for organized medicine. It seems that perhaps the tide of feeling is away from socialization but we cannot relax for one moment in our effort to educate the public to the evils and end results in allowing our freedom to be legislated away.

It has been a great pleasure to work with Doctor Garrison. We should be very grateful to him because of his interest and efforts in the cause of organized medicine and in the political freedom of our country.

We should look forward to a bigger and better year and many accomplishments in the future.

Respectfully submitted,
L. G. Livingston, M.D.
Councilor, District No. 14

LIFE MEMBERSHIP

The following applications have been presented for Life Membership. The applications are in order for presentation to the Council and the House of Delegates:

Frederick Addison Anderson, M.D., Claremore, Oklahoma

Leila E. Andrews, M.D., Oklahoma City, Oklahoma

A. M. Arnold, M.D., Claremore, Oklahoma

Roscoe C. Baker, M.D., Enid, Oklahoma

William C. Bryant, M.D., Chouteau, Oklahoma

A. W. Clarkston, M.D., Valliant, Oklahoma

N. L. Cornwell, M.D., Coyle, Oklahoma

J. W. Craig, M.D., Miami, Oklahoma

A. Dixon, M.D., Hennessey, Oklahoma

Paul E. Haskett, M.D., Oklahoma City, Oklahoma

William C. Gilliam, M.D., Spiro, Oklahoma

G. R. Gerard, M.D., Chickasha, Oklahoma

S. J. T. Hines, M.D., Tahlequah, Oklahoma

A. F. Hobbs, M.D., Hinton, Oklahoma

W. L. Mabry, M.D., Leedey, Oklahoma

L. H. McConnell, M.D., Altus, Oklahoma

G. M. McVey, M.D., Verden, Oklahoma

James L. Miner M.D., Tulsa, Oklahoma

S. W. Minor, M.D., Hinton, Oklahoma

A. M. Mixon, M.D., Spiro, Oklahoma

M. V. Moth, M.D., Oklahoma City, Oklahoma

D. W. O'Leary, M.D., Norman, Oklahoma

C. S. Petty, M.D., Guthrie, Oklahoma

John S. Pine, M.D., Oklahoma City, Oklahoma

Arthur S. Piper, M.D., Enid, Oklahoma

Benjamin W. Ralston, M.D., Commerce, Oklahoma

John A. Reck, M.D., Oklahoma City, Oklahoma

James F. Renegar, M.D., Tuttle, Oklahoma

William H. Rhodes, M.D., Enid, Oklahoma

M. R. Robberson, Sr., M.D., Wynnewood, Oklahoma

F. W. Rogers, M.D., Carnegie, Oklahoma

S. C. Rutherford, M.D., Locust Grove, Oklahoma

A. H. Shi, M.D., Stratford, Oklahoma

Wm. M. Taylor, M.D., Oklahoma City, Oklahoma

Will C. Wait, M.D., McAlester, Oklahoma

Jesse E. Wallace, M.D., Tulsa, Oklahoma

R. W. Williams, M.D., Anadarko, Oklahoma

J. L. Wharton, M.D., Depew, Oklahoma

AMALGAMATIONS

The following have made application for amalgamation or dissolution. All requirements have been met and the petitions are in order for presentation to the Council and House of Delegates:

Carter-Love-Marshall County Medical Society
tion. All requirements have been met and petitions are in order for presentation to the Council and House of

Delegates:

Carter-Love Marshall County Medical Society—(Amalgamation).

Muskogee-Sequoyah-Wagoner-McIntosh — (Amalgamation).

Pontotoc-Murray — (Dissolution).

HONORARY MEMBERSHIP

The following applications have been received for Honorary Membership:

Pleasant P. Nesbitt, M.D., Tulsa, Oklahoma

J. H. White, M.D., Muskogee, Oklahoma

John A. Morrow, M.D., Sallisaw, Oklahoma

ASSOCIATE MEMBERSHIP

The following applications have been received for Associate Membership:

Lt. Col. Byron A. Nichol, Ft. Sill, Oklahoma

Robert E. Beddoe, M.D., Shawnee, Oklahoma

COMMITTEE REPORTS

REPORT OF THE PUBLIC POLICY COMMITTEE

Part I—Legislation

While your Public Policy Committee is and has always been primarily interested in legislation which affects the health and welfare of the people, the Committee recognizes the fact that at the present time the medical profession must concern itself also with the overall trend toward socialization. Therefore, in addition to the record breaking number of health and welfare bills which have been introduced in the 81st Congress, this report will attempt to summarize briefly other legislation important to the profession.

No less than eight bills proposing some form of national health insurance are now before Congress. More can be expected. All of these bills are founded on the premise that many Americans cannot afford the cost of adequate medical care. The administration bill (S. 1679) proposes the use of a payroll tax plus government funds to finance a system of national compulsory health insurance which would provide medical care for 85 per cent of the population. The other bills variously propose systems of health insurance financed jointly by state and federal funds. Some cover only the medically indigent. Others would include all families having an annual income of \$5000 or less — more than three-fourths of the population. Some of the bills are based on federal subsidization of the existing voluntary non-profit medical care plans.

Some fourteen bills proposing that voluntary medical care insurance premiums be deductible from income taxes have been introduced to Congress this year.

The Committee does not wish to take the time of the House of Delegates to outline in detail the contents of this large number of bills. It does, however, wish to assure the House that legislative developments are followed closely by the Committee and reported to the Council when the necessity for action arises. As an example of this type of action, Oklahoma State Medical Association was one of the groups spearheading the "grass roots rebellion" which resulted in the Senate's rejection of the president's Reorganization Plan Number One last August. This plan would have elevated the Federal Security Agency to cabinet status as a Department of Welfare. It was thought that F.S.A. Administrator Oscar Ewing, the nation's number one proponent of socialized medicine would have been in line for the post of Secretary of Welfare.

There are three additional pieces of legislation to which the Committee would direct the attention of the House of Delegates, inasmuch as all three have bearing on the health and welfare of the American people, all three would further the aims of those who would like to see a system of national compulsory health insurance in this country, and all three have already passed one house of Congress. These are:

(1) The federal aid to medical education bill (S. 1453) which would have the federal government subsidizing medical schools. And it is known fact that where the government subsidizes, it also regulates.

(2) The school health services bill (S. 1411) which would provide for medical care to all children of school age, regardless of the ability of the parents to pay.

(3) Social Security expansion (H.R. 6000) which includes a proposal for permanent and total disability insurance — a step toward national compulsory health insurance — and expansion of the present Social Security

system at vast expense to the taxpayers.

The Committee respectfully requests that the House of Delegates again voice unalterable opposition to any form of socialism in this country.

Because of the length of this report, the Committee will not attempt to forecast the situation regarding the coming state legislature. The Committee feels that the usual problems can be anticipated and that additional problems are quite likely to arise in connection with the growing interest of the federal government in state governments.

Part II—State Educational Program

During the past year your Public Policy Committee has noted an increasing awareness on the part of the people of Oklahoma of the grave danger to individual liberty which lies in the Welfare State philosophy. This increased awareness is reflected in the press and in the number of requests the Committee receives for speakers and literature on health insurance and related questions.

Your Committee feels that some part of the credit for this increased public awareness is due the Association's educational program, but that credit must be given also to the Auxiliary, to the National Education Campaign of the A.M.A., and to the numerous other groups — civic, professional and business — which are actively opposing any further encroachment of socialistic principles on the American scene.

The importance of continuing the educational program on national, state and local levels cannot be overestimated, in the opinion of your Committee, and the need for individual physicians to give their time and energies to this program still is acute.

Your Committee has recognized the value of the A.M.A. National Education Campaign against compulsory health insurance and has attempted to meet its responsibility to provide direction and administration of the Campaign at the state level. The Oklahoma State Medical Association's public relations program has been closely correlated to the four-point plan of the National Education Campaign which consists of

1. An effective, statewide Endorsement Drive
2. An intensive Publicity Campaign
3. A well organized, adequately staffed Pamphlet Distribution System
4. An energetic, carefully managed Speakers Bureau

In all possible ways, your Committee has extended its fullest cooperation to the A.M.A. and the National Education Campaign. Representatives of the Association have attended all national campaign meetings and have also appeared before the Board of Trustees in an advisory capacity.

Recognizing the importance of public speaking as a medium in public relations, your Committee and the Auxiliary have attempted to fill every request for a speaker, although the personnel for organizing and operating a Speakers' Bureau has not been available from the Executive Office. During the past year 800 audiences have been reached and 300 kits for speakers have been distributed to members of the profession and the Auxiliary, interested lay persons, and high school and college debate students.

The Committee has also sponsored the appearances in Oklahoma of several speakers of national reputation, including Ralph J. Gampell, M.D., and John W. McPherrin, and hopes to bring others to the state.

Your Committee has worked since its inception to

build good press relations for the profession and feels that much has been accomplished in this field. During the past year, some 15,000 column inches of news and editorial comment related to the medical profession has appeared in Oklahoma newspapers. News releases sent out periodically by the Association receive excellent press. Several newspaper ads have been sponsored this year by the Committee in cooperation with the various County Medical Societies.

The Committee hopes to hold a conference of representatives of the press and the medical profession during the coming year to discuss the mutual problems of the two professions.

The establishment of the Grievance Committee has been, in the opinion of the Public Policy Committee, the Association's most significant action this year in the field of public relations. Feeling that it had a major responsibility to inform the public of the existence and the function of this Committee and the procedure to be followed in bringing a complaint before it, the Public Policy Committee has endeavored to work toward this. The Committee feels that the press of the state met the profession more than half way in this and that the excellent and widespread publicity given the Grievance Committee has increased the value of the Grievance Committee to both the profession and the public.

The News Letter of the Association has been issued monthly, summarizing news of interest to the profession in capsule form and putting particular emphasis on important developments in national legislation and other public relations problems.

The radio program has been continued this year with the "Tell Me, Doctor" series running on nine stations — Ada, Bartlesville, Chickasha, El Reno, Lawton, Muskogee, Norman, Oklahoma City and Tulsa. The Radio Sub-Committee of the Public Policy Committee has auditioned five new programs with a view to expanding the radio phase of the public relations program, but has not found a program of sufficient interest to merit sponsorship. The Committee plans to continue to audition new programs.

A junior and senior high school essay contest on "Socialized Medicine: An Unsound Proposal" which was conducted last fall in connection with the Association exhibit at state fairs was not considered wholly successful by the Committee, as the number of entries in the contest was small. However, holding the contest did serve to distribute a large quantity of literature to homes and schools throughout the state.

Several County Medical Societies are sponsoring the American Association of Physicians and Surgeons Essay Contest this year.

During the past year, 510,000 pieces of the National Education Campaign literature have been distributed in Oklahoma. In addition to this, the Public Policy Committee has sent out some 20,000 additional pieces of literature, including magazine reprints, U. S. Chamber of Commerce material and more than 1100 copies of the John T. Flynn book "The Road Ahead". The Committee would like to call the attention of the House of Delegates to the acceleration in this phase of the public relations program, contrasting the 530,000 pieces of literature distributed in the past year with the 15,000 distributed in the first four months of 1949, as reported at the Annual Meeting last year.

In cooperation with the Woman's Auxiliary, the Visual Education Sub-Committee of the Public Policy Committee presented an exhibit this year at the following fairs and conventions: Garvin County Fair, Seminole County Fair, Tulsa State Fair, Oklahoma State Fair, Muskogee Free State Fair, Oklahoma Education

Association and Made-in-Oklahoma Show. More than 600,000 persons saw the exhibit.

The Committee has just completed plans for purchasing the Oklahoma rights to a compulsory health insurance film "To Your Health" produced by Michigan State Medical Society. This film, beginning within thirty days, is to be shown in approximately 150 moving picture theaters throughout the state and will be seen by approximately 350,000 persons.

Because of the great importance of the coming Congressional elections in determining the composition of the Congress which will consider legislation vital to the health and the welfare of the people and the freedom of the medical profession, your Committee with the advice of the Council and the Association's legal advisors, has given serious study to the coming political campaigns. With the approval of the Council, the Committee has requested the President of the Association to appoint a committee in each Congressional District made up of one representative of each County Medical Society in the District. The duties of this Committee are the interviewing of all candidates regarding their views on issues which affect health and welfare and the reporting back to their County Medical Societies on this.

Your Committee would like to emphasize that it feels that every physician should recognize his duty as a citizen to investigate issues and to exercise his voting franchise in the coming elections. The results of a survey made by Ohio State Medical Association to determine how many business and professional people failed to register and vote were reported in a recent News Letter and were sufficiently disturbing to move this Committee and the Auxiliary to take under consideration a plan for conducting a similar survey in Oklahoma.

As the House of Delegates knows, funds for the public relations program through 1949 were provided by \$20 of the Oklahoma State Medical Association dues which were set aside for this purpose. Beginning with 1950, all moneys from dues are to be placed in the general fund and this Committee is to request appropriations as needed. The Committee has been as judicious in expenditures as possible but it would like to point out that if the public relations program is to continue it must be adequately financed.

Your Committee feels that it could not close this section of its report without acknowledging the debt which the entire Association owes to the Auxiliary for its many accomplishments in the field of public relations during the past year and for its wholehearted cooperation with the Public Policy Committee at all times.

Respectfully submitted,
McLain Rogers, M.D., Chairman
John W. Records, M.D.
C. W. Arrendell, M.D.
L. J. Starry, M.D.
Joe L. Dner, M.D.
John E. McDonald, M.D.

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

There have been no formal meetings of this Committee during the past year. Individual members of the Committee have interested themselves in the Medical Research Foundation project.

Respectfully submitted,
James Stevenson, M.D., Chairman, Tulsa
Sam McKeel, M.D., Ada
John Carson, M.D., Shawnee
W. W. Cotton, M.D., Atoka
Henry H. Turner, M.D., Oklahoma City
Ray Lindsay, M.D., Pauls Valley

REPORT OF THE MEDICAL ADVISORY COMMITTEE TO THE VOCATIONAL REHABILITATION DIVISION

A meeting of the Professional and Medical Advisory Committee was held Sunday, December 4, 1949, at the Oklahoma City District Office, 129 N. W. 13th. St. The meeting was called to order at 2:00 p.m. by Dr. Clinton Gallaher, Chairman. Members attending the meeting included Dr. Bert F. Keltz, Dr. Fred O. Pitney, Mr. Harry C. Smith, Dr. Francis E. Dill, Dr. M. F. Prosser, Mr. Dick Graham, Mr. Joe N. Hamilton, Mr. Voyle C. Scurlock, Mr. Fred Henderson, Miss Idabel Sine, and Mrs. Maxine Fisher.

Mr. Voyle Scurlock, Director of the Vocational Rehabilitation Service, explained the problem of the desires for further recognition on the part of the osteopaths and their acceptance for the medical examinations of the Vocational Rehabilitation clients. The subject was discussed extensively by all those present.

Mr. Scurlock suggested that some thought should be given to the fact that there is need for enlargement of the personnel of the Advisory Committee. Mr. Scurlock is particularly interested in having someone who is interested in plastic surgery.

The subject of hospital costs was discussed by Mr. Harry Smith and others who were present. A motion was made that the Vocational Rehabilitation Service be advised to accept hospital bills submitted as in private cases and to allow per diem costs up to \$14.50 per day, unless regulations will not permit.

Respectfully submitted,
Clinton Gallaher, M.D., Chairman
J. O. Asher, M.D.
Bert F. Keltz, M.D.
John Perry, M.D.
Fred O. Pitney, D.D.S.
Mr. Harry Smith

REPORT OF THE CRIPPLED CHILDREN'S COMMITTEE

The Crippled Children's Committee takes pleasure in reporting that there were 19 Crippled Children's Clinics held in the State of Oklahoma during the year 1949.

In these Clinics there were 721 children examined. There were 2,024 patients admitted to Oklahoma hospitals in the year 1949.

The medical profession has cooperated greatly in all efforts of the Crippled Children's Society to supervise and carry out the various clinics. All work is being carried out in the normal ethical manner.

The appointment of the medical examiners is carried out through a Commission now rather than through an Advisory Committee as was the case previous to 1949.

Respectfully submitted,
Earl D. McBride, M.D., Chairman
L. S. Willour, M.D.
Ben H. Nicholson, M.D.
D. H. O'Donoghue
C. A. Traverse, M.D.
W. B. Mullins, M.D.
Ian MacKenzie, M.D.

REPORT OF THE VETERANS CARE COMMITTEE

The over all operation of the Veterans Home Town Medical Care Plan during the past year has been generally satisfactory from the standpoint of relations with the profession.

The Committee held one meeting jointly with the Advisory Committee at which time changes in the fee

schedule were thoroughly discussed and considered. It is well to point out that the net effect of those changes was to increase the fees for the various items in the schedule which were changed. In no occasion were the fees lowered except in situations in which items were divided resulting in an over all higher fee in each such case. The new schedule has now been placed in operation and payments to physicians cooperating in the Veterans Home Town Medical Care Plan are now being made upon the basis of that schedule. The Committee will continue its effort to secure upward revisions of such items of the schedule as may justify that action. From July 1, 1949, to May 1, 1950, the members of the Association have participated in the program as follows:

Oklahoma City Regional District

Veteran treatments	5,684
Amount paid to participating physicians	\$79,002
Veteran examinations	6,476
Amount paid to participating physicians	\$70,465

Muskogee Regional District

Veteran treatments	3,795
Amount paid to participating physicians	\$66,695
Veteran examinations	2,696
Amount paid to participating physicians	\$29,933

Total number treated	9,479
Total number examinations	9,172
Total treatments and examinations	18,651
Total payment to physicians for veteran treatments	\$145,697
Total payment to physicians for examinations	\$100,398
Total payment to physicians for treatment and examinations	\$246,095

The Committee has continued the supervision of the Association's participation in the Veterans Care program through the Consultant Advisory Committee for each regional district. Due to the fact that the participating physicians have become better acquainted with the details of operation of the program it has been possible for the Consultant Committee to handle the problems which have arisen with many less meetings than have been necessary in the past. The Consultant Committee for the Oklahoma City District has held five meetings and the Committee for the Muskogee District four meetings.

Almost without exception the members participating in the program have cooperated to the fullest extent with the recommendations of the Consultant Committee and it can well be said that these Committees have served a very useful purpose of avoiding undue friction in the operation of the program.

Your Committee recognizes that in the administration of any medical care program of comparable magnitude there are from time to time difficulties arising in individual cases. On the other hand, it is the belief of the Committee that the number of such difficulties and their seriousness has been held to a minimum and that the Oklahoma State Medical Association should continue its participation in this worthwhile effort.

Respectfully submitted,
LeRoy Sadler, M.D., Chairman
John F. Burton, M.D.
Ben Ward, M.D.
E. G. King, M.D.
James F. Curry, M.D.

REPORT OF THE COMMITTEE ON POSTGRADUATE MEDICAL TEACHING

The Postgraduate Committee of the Oklahoma State Medical Association makes the following report to the House of Delegates:

In July, 1949, the postgraduate course in Internal Medicine opened in Northeastern Oklahoma with Robert M. Becker, M.D., as the instructor. Doctor Becker has now completed four circuits of his two year program with a total enrollment of 360 physicians. The attendance has been excellent with an average of 89 per cent. Certificates of Attendance have been issued to those whose attendance averaged 70 per cent or more and an abstract (in printed form) of Doctor Becker's lectures has been given to each physician enrolled.

The Commonwealth Fund of New York has, during the past 12 years, contributed \$111,560.00 to this program in Oklahoma. It has been the policy of The Commonwealth Fund to assist in the stimulation of such postgraduate education on a ten-year basis; however, in our instance they waived their usual restriction and participated in one additional two-year program. At the conclusion of the present course in Internal Medicine The Commonwealth Fund will discontinue its financial support, as per their initial plan, namely, to sponsor but not permanently subsidize this form of postgraduate teaching.

In order to make these programs become self supporting your Committee has increased the fees to the individual doctor from \$6.00 to \$20.00 for the present course in Internal Medicine. There have been three Committee meetings since our last report and at one of the more recent meetings it was unanimously voted to raise the enrollment fee from \$20.00 to \$25.00 for the course which will succeed the present one. Your Committee felt that on a minimum basis of the average enrollments over the past years that by boosting the enrollment fee from \$20.00 to \$25.00 the Committee, itself, could raise approximately half of the loss of revenue occasioned by the withdrawal of The Commonwealth Fund. Obviously, there would be a deficit of approximately \$2,000.00 annually in the financing of a future course and this Committee has asked the Council to consider making up any deficit that might occur in the above manner of financing. In the foregoing programs the Association has contributed \$2,000.00 annually, or a total of \$24,000.00 for the carrying on of this postgraduate study.

We would also like to point out that during the past 12 years the Oklahoma State Health Department has paid half of the instructor's salaries or a total of \$64,000.00. It has been indicated that the Health Department will make every effort to continue in their liberal assistance financially as well as in many other ways.

In tabulation of the questionnaires which have been returned to the Postgraduate Committee we find that psychosomatic medicine is most favored for the next course to succeed almost immediately the present one.

On April 26, 1950, your Committee met with Harry E. Handley, M.D., Public Health Associate, of The Commonwealth Fund of New York, to discuss with him the success of such programs in other states, how they have been financed, length of the courses, availability of instructors, type of instructors and the most useful type of program in the field of psychiatry. It was the consensus of opinion that the next course should dwell on psychosomatic and psychoneurotic medicine and that there should be the usual ten lectures. Doctor Handley felt that The Commonwealth Fund could give

the Committee various leads as to competent men to teach such a course. He indicated they would cooperate in every way in aiding the Committee to find the right man for this position.

The Committee is now in the process of investigating other programs of this type and the possibilities of obtaining a competent instructor. We will report, through the Journal of the Oklahoma State Medical Association, from time to time the progress we are making.

The Postgraduate Committee of the Oklahoma State Medical Association desires to express thanks to The Commonwealth Fund of New York, the Oklahoma State Health Department and the United States Public Health Service for their continued financial assistance, and further recommends that the House of Delegates, by resolution, express its appreciation to these contributing agencies.

The Committee also desires to extend their appreciation to Mr. Dick Graham and Mr. John Hart for the splendid field work they have done in enrolling the physicians and organizing the various centers over the state.

Respectfully submitted,
Harry A. Daniels, M.D., Chairman
Floyd T. Bartheld, M.D.
J. Wm. Finch, M.D.
R. C. Gentry, M.D.
O. R. Gregg, M.D.
W. A. Hyde, M.D.
John F. Kuhn, Jr., M.D.
Harold H. Macumber, M.D.
O. L. Parsons, M.D.
C. J. Roberts, M.D.
Homer A. Ruprecht, M.D.
Fred W. Sellers, M.D.
Wendell L. Smith, M.D.
I. F. Stephenson, M.D.

REPORT OF THE COMMITTEE ON RURAL HEALTH

The Committee on Rural Health submits the following report to the House of Delegates:

The Committee was in attendance at the winter meeting of the American Medical Association Conference on Rural Health and participated therein.

The problems of rural health in Oklahoma are similar to those of many other rural states. Namely, the availability for smaller communities of physicians and hospital facilities. Your committee is in full sympathy with the preceptorship plan of instruction instituted by the Medical School and hopes that it will have some measure of success in locating physicians in smaller communities. Your committee will also point out the increase in hospital construction in many areas of the state although it cannot say that hospital construction under the Hill-Burton plan has reached what is usually referred to as the smaller community.

Prepaid hospitalization plans are making themselves felt in rural areas and are bringing about a general raising of the level of health care for rural people. Your committee recommends the continuation of this movement.

Respectfully submitted,
Ned Burleson, M.D., Chairman
J. A. Morrow, M.D.
M. H. Newman, M.D.
F. Keith Oehlschlager, M.D.

REPORT OF THE COMMITTEE ON NECROLOGY

The Committee on Necrology submits the following report to the House of Delegates:

Since the last Necrology report in May, 1949, The Almighty in his infinite wisdom has called from our midst 30 of our beloved friends and co-workers. While we bow in sorrow to the will of the Omniscience, we are appreciative of these wonderful men. Physicians, scientists, teachers and friends, and their far-reaching influence which will continue to inspire us to carry on our duties to Humanity.

THHEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association, recognize the demise of those former 30 Fellow Members and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association:

G. V. Dorsheimer	Dewey	March, 1949
Frank W. Boadway	Ardmore	April, 1949
G. H. Stagner	Edmond	April, 1949
O. O. Hammonds	Oklahoma City	May, 1949
Hugh L. Rains	Okmulgee	May, 1949
C. E. Barker	Oklahoma City	June, 1949
John S. Rollins	Prague	July, 1949
William Jackson Sayles	Miami	August, 1949
A. B. Stephens	Seminole	August, 1949
Duke W. Vincent	Vici	Sept., 1949
Leon Janco	Oklahoma City	Oct., 1949
Charles D. Blachly	Oklahoma City	Nov., 1949
John C. Dovell	Paden	Nov., 1949
D. E. Cantrell	Healdton	Nov., 1949
J. T. Frizzell	Clinton	Dec., 1949
Raymond W. Stoner	Checotah	Dec., 1949
Joseph S. Fulton	Atoka	Jan., 1950
J. T. Looney	Tishomingo	Feb., 1950
D. W. Miller	Blackwell	Feb., 1950
Harvey O. Randel	Oklahoma City	Feb., 1950
Walter W. Wells	Oklahoma City	Feb., 1950
W. H. Freeman	Sentinel	March, 1950
C. M. Maupin	Waurika	March, 1950
Alfred J. Metscher	Enid	March, 1950
Robert M. Alexander	Paoli	March, 1950
Vern H. Musiek	Oklahoma City	March, 1950
E. A. Kelleam	Wright City	March, 1950
H. M. Reeder	Konawa	March, 1950
L. R. Pace	Seminole	April, 1950
Charles G. Price	Durant	April, 1950

Respectfully submitted,

P. P. Nesbitt, M.D., Tulsa, Chairman

George H. Neimann, M.D., Ponca City

REPORT OF THE COMMITTEE FOR THE CONSERVATION OF HEALTH

Mortality and morbidity statistics may be used as a criterion for judging the progress which has been made in conserving the health of the people of Oklahoma and may be used, also, as a guide for determining what efforts should be made to this end in the future. Certain provisional statistics obtained from the birth and death certificates and morbidity reports filed in Oklahoma during 1949 are used in the following paragraphs to indicate some of the health trends during that year.

Half of Oklahoma Deaths Caused by Chronic Disease of Old Age

Diseases of the heart, cancer, and vascular lesions affecting the central nervous system were the three leading causes of death in 1949, accounting for 55 per cent of the 18,832 deaths that occurred in Oklahoma during that year.

Heart disease, by far the leading cause, was specified as the underlying cause of death on 5,740 certificates. Arteriosclerotic and degenerative heart diseases accounted for 70.5 per cent, chronic rheumatic heart diseases for 3.7 per cent, and all other heart diseases for 9.1 per cent. The provisional estimated death rate of 249.3 per 100,000 estimated population continued the upward swing of deaths due to diseases of the heart. Some of the increase over the rate of 222.3 in 1938, however, was due to a change in coding procedures which caused a corresponding drop in the death rate for nephritis and nephrosis from 44.3 in 1948 to 10.5 in 1949.

Death rates for cancer and for vascular lesions affecting the central nervous system continued to increase also, with rates of 107.1 and 92.9, respectively, per 100,000 population, as compared to 106.7 and 86.3 in the previous year.

Since cancer appears to be of increasing importance in an aging population and since it is amenable to treatment if discovered early enough, this disease was made reportable in August, 1947. Hence, in addition to the data obtained from death certificates, information is now available from the morbidity reports. Certain tabulations have been made for the first two full years of this program. During 1948, 1,636 cases of cancer were reported by morbidity certificates. About 55 per cent of these patients were females, among whom the most frequently reported primary site was the uterus, followed by breast and skin, in that order. Among males, on the other hand, the skin was the leading primary site, with approximately one-third of the reported cases, followed by buccal cavity and pharynx, and by digestive organs and peritoneum. In 1949, 872 male cases were reported, and 834 female. Again uterus, breast, and skin were the most prevalent sites among the women patients. Skin was the leading site for the males in 1949, followed by digestive organs and peritoneum, and buccal cavity and pharynx. Although cases were reported for all age groups, almost half of the patients in each year were from 55 through 74 years of age. The attack rate by age group cannot be determined at present, since the composition of Oklahoma's population is not adequately known.

Other leading causes of death in 1949 were accidents, congenital malformations and certain diseases of early infancy, pneumonia, tuberculosis, and nephritis and nephrosis, in the order named. Deaths from pneumonia and tuberculosis have been decreasing rapidly, and the provisional rates for 1949, 24.1 and 21.6, respectively, indicate that this trend is continuing.

Although not one of the ten leading causes of death in Oklahoma, diabetes mellitus continues year after year to claim about 300 victims, with an apparent slight upward trend in mortality attributed to this cause. In 1948, the number of deaths assigned to diabetes reached a high of 393. In 1949, the provisional number was 295. Much of this apparent drop, however, was probably due to the previously mentioned change in coding procedure.

The total resident death rate for the State was 8.4 per 1,000 estimated population, using as a base the Census Bureau's provisional population estimate of 2,302,000. Of the 18,832 persons who died in Oklahoma during 1949, 481 were residents of other states; 952 residents of Oklahoma died elsewhere. Hence, there were 19,303 deaths of Oklahoma residents during the year.

Infant Deaths Decrease

A provisional infant death rate of 30.2 per 1,000 live births indicates that the 1949 final infant death rate

may be lowest on record for the State. In 1929, approximately 70 out of every 1,000 babies died before they were one year old. By 1947 this rate had been reduced to 32.6 per 1,000, the previous low annual rate.

About 71 per cent of the infant deaths during the past year occurred during the first month of life. In 1929, only 52 per cent of the infant deaths occurred during the first month. These figures indicate that, although the number of deaths of babies under one month of age has decreased considerably, the greatest decrease has been for those from one month through eleven months of age.

Prematurity (or immaturity) continued to be the chief cause of these infant deaths. In 1949, about 365 infant deaths, 24.5 per cent of the total, were attributed to this cause alone. Many of the other deaths were due to immaturity along with some other cause or combination of causes, but the figures for these deaths of immature babies are not yet available. The 1949 statistics for deaths due to immaturity alone are not comparable with those for other years due to changes in coding procedures. Immaturity, congenital malformations, injury at birth, and other diseases of early infancy accounted for about 17 per cent of the deaths under one year of age.

Toxemia Chief Cause of Maternal Deaths

Of the 66 deaths assigned to maternal causes during the year, 18 or 27.3 per cent, were attributed to toxemias of pregnancy, and five, or 7.6 per cent, to puerperal toxemias. Delivery complicated by hemorrhage was given as the cause of death on ten certificates. Eight of the maternal deaths followed abortions, and five, ectopic pregnancies.

The provisional maternal death rate of 1.3 per 1,000 live births was still in line with the downward trend; it was not significantly different from the all-time low rate of 1.2 for the State in the previous year.

Physicians Deliver Ninety-Seven Per Cent of Oklahoma Babies

During the past year, 49,400 babies were born alive in Oklahoma. A large majority, about 82 per cent, of these infants were delivered by physicians in hospitals, and another 15 per cent were delivered by physicians in homes. About 75 per cent of the midwife deliveries occurred in the non-white population.

Of all the live births which occurred in Oklahoma, 1,282 were to non-residents of the State. Copies of certificates received from other states indicated, however, that an additional 1,660 births to Oklahoma mothers occurred during the year, making a total of 49,778 resident Oklahoma births. A birth rate of 21.6 per 1,000 population, based on the provisional estimated population of 2,302,000, showed no change in the birth trend from the 1948 birth rate.

Poliomyelitis Highest on Record

More cases of poliomyelitis occurred during 1949 in Oklahoma than during any other year for which rec-

ords are available; 1,320 cases were reported, as compared to 594 in the previous peak year, 1943. The case fatality rate of 8.2 deaths per 100 cases, however (based on the 108 deaths recorded), was not as high as the rate of 9.5 in 1948, when 35 deaths occurred and 369 cases were reported.

Some attempt was made in 1949 to determine how many of the reported cases were paralytic, but this information was reported for less than 20 per cent of the total number of cases. About 212 were reported as paralytic, while reports for 48 of the cases specified that they were non-paralytic.

Measles, also, showed a decided increase, with 7,538 reported cases during the year and an attack rate of 327.4 per 100,000 estimated population. This rate was the highest recorded in Oklahoma since 1934. However, this year of high incidence followed two years in which the number of reported cases was relatively low: 168 in 1947, and 1,633 in 1948. Thirty deaths due to measles were recorded in 1949. This number was exceeded by the 31 deaths reported in 1946, and by the deaths reported in 1944 and 1942, as well as in earlier years.

On the other hand, whooping cough, after two years of high incidence, fell to 228 reported cases in 1949 for a rate of 9.9, the lowest since 1939, and the second lowest on record. This rate compares with 46.4 for 1948 and 34.6 for 1947. Seven deaths were assigned to whooping cough during the year, as compared to 46 during 1948 and 41 in 1947.

Diphtheria continued in 1949 the rather consistent downward trend that has been in evidence at least since 1921. During the year, 131 cases were reported, for a rate of 5.7, compared to 165 and 7.1, respectively, for 1948. Deaths from diphtheria totaled eight, down 50 per cent from the previous year's total of 16.

Typhoid fever showed no change from the previous year; 74 cases were reported in each year. However, only three deaths were reported as due to this cause, while six were reported during the previous year, and nine in 1947.

In recognition of its role as a crippler and killer, especially in the younger ages, rheumatic fever was made reportable in Oklahoma and was tabulated for the first time in 1949. During the year 102 cases of this disease were reported, and one case of chorea. Since there are no earlier figures available, no comparison of incidence can be made. However, 21 deaths were reported during the year as compared to nine in 1948 and 8 in 1947. In making rheumatic fever reportable, it was hoped to make available to the families of the patients the nursing supervision of the health departments.

Respectfully submitted,

Onis Hazel, M.D., Chairman

Glen McDonald, M.D.

W. K. Haynie, M.D.

Elton LeHew, M.D.

Rhonald Whiteneck, M.D.

Charter Fellow
American College Hospital Administrators
Life Member
American Hospital Association

Charter Member
American Association of Hospital Consultants
Honorable Mention "Modern Hospital"
Competition for Plans of Small Hospitals

PAUL H. FESLER

HOSPITAL CONSULTANT

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Surveys — Planning — Organization

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Choctaw Co. Hospital, Hugo
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University of Oklahoma, Oklahoma City
University of Minnesota, Minneapolis
Wesley Memorial Hospital, Chicago

ANNUAL AUDIT REPORT

George H. Garrison, M.D., President
Oklahoma State Medical Association
210 Plaza Court
Oklahoma City, Oklahoma

January 20, 1950

Dear Sir:

We have completed an Audit of the Financial Records of:

MEMBERSHIP & JOURNAL ACCOUNTS OF
THE OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

for the period January 1, 1949 to December 31, 1949, and submit herewith the following Exhibits.

- EXHIBIT "A"—Balance Sheet
- EXHIBIT "B"—Income & Expense Statement
- Schedule 1—Schedule of Disbursements
- EXHIBIT "C"—Bank Reconciliation

We wish to thank you for this Audit, and if we can be of further service, please feel free to call upon us.

Respectfully submitted,
H. E. COLE COMPANY
By H. J. Cole

It

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "A"

MEMBERSHIP & JOURNAL ACCOUNTS

BALANCE SHEET

December 31, 1949

ASSETS

CURRENT ASSETS	Total	Membership	Journal
Bank	\$17,330.74	\$15,262.77	\$ 2,067.97
Petty Cash	6.79	6.79	
	\$17,337.53	\$15,269.56	\$ 2,067.97
FIXED ASSETS			
Furniture & Fixtures	4,403.57	4,403.57	None
INVESTMENT			
U. S. Bonds	12,398.88	12,398.88	None
TOTAL ASSETS	\$34,139.98	\$32,072.01	\$ 2,067.97

LIABILITIES

CURRENT LIABILITIES			
Accrued Withholding Tax	\$ 224.20	\$ 146.00	\$ 78.20
Accrued Social Security	24.30	15.72	8.58
Accounts Payable	7.42	7.42	None
	\$ 255.92	\$ 169.14	\$ 86.78
OPERATING RESERVE	33,884.06	31,902.87	1,981.19
TOTAL LIABILITIES	\$34,139.98	\$32,072.01	\$ 2,067.97

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "B"

MEMBERSHIP & JOURNAL ACCOUNTS

INCOME & EXPENSE STATEMENT

January 1, 1949 to December 31, 1949

	<i>Total</i>	<i>Membership</i>	<i>Journal</i>
Cash Balance — January 1, 1949	\$14,734.16	\$12,941.28	\$ 1,792.88
Petty Cash41	None	None
Accounts Receivable	250.00	None	250.00
	<u>\$14,984.57</u>	<u>\$12,941.69</u>	<u>\$ 2,042.88</u>
<i>Revenue</i>			
Ads	14,310.03	None	14,310.03
Annual Meeting	5,648.00	5,648.00	None
Directory	240.00	52.50	187.50
Dues	31,831.65	31,831.65	None
Kansas Division American Cancer Society	54.97	54.97	None
L. J. Moorman	9.13	9.13	None
U. S. Bond Interest	167.50	167.50	None
Membership Fund	7,000.00	None	7,000.00
Subscriptions	44.00	None	44.00
Plane Tickets — John Hart	96.60	96.60	None
Publicity Fund	10,000.00	10,000.00	None
	<u>\$84,386.45</u>	<u>\$60,802.04</u>	<u>\$23,584.41</u>
<i>Disbursements — Schedule</i>			
Expense	\$66,651.85	\$45,318.13	\$21,333.72
Less Accruals	248.50	161.72	86.78
Plus Withholding & Social Security Paid	652.99	383.49	269.50
	<u>\$67,056.34</u>	<u>\$45,539.90</u>	<u>\$21,516.44</u>
Revenue over Disbursements	\$17,330.11	\$15,262.14	\$ 2,067.97
<i>Cash Reconciliation</i>			
Bank Balance — 12-31-49	\$17,330.74	\$15,262.77	\$ 2,067.97
Petty Cash	6.79	6.79	None
Accounts Payable	—7.42	—7.42	None
	<u>\$17,330.11</u>	<u>\$15,262.14</u>	<u>\$ 2,067.97</u>

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "B"

Schedule 1

MEMBERSHIP & JOURNAL ACCOUNTS

SCHEDULE OF DISBURSEMENTS

January 1, 1949 to December 31, 1949

<i>EXPENSE</i>	<i>Total</i>	<i>Membership</i>	<i>Journal</i>
Annual Meeting Expense	\$ 6,111.45	\$ 6,111.45	None
A.M.A. Expense	271.58	271.58	None
Auditing and Legal	300.00	300.00	None
Bonds — Surety	212.63	212.63	None
Delegate Credential Cards	8.67	8.67	None
Dues — Medical Societies	60.90	36.70	24.20
Express and Delivery	31.54	31.54	None
Insurance — Group Hospital	200.90	200.90	None
Insurance — Fire	25.88	25.88	None
Journal Fund	7,000.00	7,000.00	None
Journal Binding	30.00	None	30.00
Journal Engraving	423.48	None	423.48
Journal Printing	11,477.77	None	11,477.77
Office Supplies & Expense	1,573.54	1,573.54	None
Post Graduate Committee	2,000.00	2,000.00	None
Postage	939.92	939.92	None
Press Clipping Service	177.10	None	177.10
Refund — Dues	31.50	31.50	None
Refund — Ads	16.20	None	16.20
Repairs	48.84	48.84	None
Rent	2,502.16	2,502.16	300.00
Salary—Executive Secretary	8,900.04	8,900.04	None
Salary—Associate Secretary	5,200.00	None	5,200.00
Salary—Office	8,412.64	6,244.64	2,168.00
Salary—Editor	1,200.00	None	1,200.00
Social Security	164.52	87.82	76.70
Stationery	131.36	128.86	2.50

Sundry:			
Curtis Minority Report	1.71	1.71	None
Conference of Presidents	50.00	50.00	None
Flowers	68.02	68.02	None
Bulb Projector	2.80	2.80	None
Letter 50 Year Charter	3.00	3.00	None
50 Year Pins	144.38	144.38	None
Directory of Medical Specialists	12.25	12.25	None
Gavel and Expense	20.27	20.27	None
Microphone Service	12.55	42.55	None
Photographic Work	16.32	16.32	None
Frames, Pictures & Certificates	123.52	118.42	5.10
Safety Deposit Box	6.00	6.00	None
Addressograph Plates	16.36	16.36	None
Telephone and Telegraph	414.54	414.54	None
Traveling	5,410.78	5,326.88	83.90
Oklahoma Unemployment Tax	355.93	207.16	148.77
Painting Office	93.00	93.00	None
County Tax	85.38	85.38	None
	\$64,319.43	\$42,985.71	\$21,333.72
Assets — Furniture & Fixtures	2,332.42	2,332.42	None
Total Disbursements	\$66,651.85	\$45,318.13	\$21,333.72

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "C"

MEMBERSHIP & JOURNAL ACCOUNTS
BANK RECONCILIATION
December 31, 1949

Membership Journal

Liberty National Bank, Oklahoma City, Okla.		
Balance per Bank Statement 12-31-49	\$15,451.40	\$ 2,160.67
Outsanding Vouchers:		

Check No.	Amount	
# 3462	\$ 28.25	
3464	85.38	
3479	75.00	188.63
3475	92.70	92.70

Balance per Books — 12-31-49	\$15,262.77	\$ 2,067.97
------------------------------------	-------------	-------------

George H. Garrison, M.D., President
Oklahoma State Medical Association
210 Plaza Court
Oklahoma City, Oklahoma
Dear Dr. Garrison:

January 20, 1950

We have completed examination of the books and records of —

THE PUBLICITY ACCOUNT OF
THE OKLAHOMA STATE MEDICAL ASSOCIATION

for the period January 1, 1949 to December 31, 1949 and submit herewith the following Exhibits:

- EXHIBIT "A"—Balance Sheet
- EXHIBIT "B"—Statement of Cash Receipts and Disbursements
- EXHIBIT "C"—Operating Statement

We wish to thank you for this audit and the courtesies extended. Please call on us at any time for further service.

Respectfully submitted,
H. E. COLE COMPANY
By H. J. Cole

It

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "A"

PUBLICITY ACCOUNT
BALANCE SHEET
December 31, 1949

ASSETS

CURRENT ASSETS	
Cash in Bank	\$21,559.01
FIXED ASSETS	
Furniture & Fixtures	1,029.54
TOTAL ASSETS	\$22,588.55

LIABILITIES

CURRENT LIABILITIES

Accrued Withholding Tax	\$	62.85	
Accrued Social Security	4.50	\$	67.35
<hr/>			
OPERATING RESERVE			21,491.66
INVESTMENT			1,029.54
TOTAL LIABILITIES			\$22,588.55

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

“EXHIBIT ‘B’”

PUBLICITY ACCOUNT

STATEMENT OF CASH RECEIPTS & DISBURSEMENTS

January 1, 1949 to December 31, 1949

Cash Balance — January 1, 1949		\$18,340.41
Revenue		28,279.33
<hr/>		
Total Disbursements	\$25,128.08	
Less Accruals	67.35	25,060.73
<hr/>		
Revenue over Disbursements		\$21,559.01
Bank Balance — December 31, 1949		\$21,559.01

BANK RECONCILIATION

December 31, 1949

Balance per Bank Statement — 12-31-49	\$21,559.01
Balance per Books — 12-31-49	\$21,559.01

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

EXHIBIT “C”

PUBLICITY ACCOUNT

OPERATING STATEMENT

January 1, 1949 to December 31, 1949

REVENUE			
Dues	\$28,110.00		
Miscellaneous Income (Refunds etc.)	169.33	\$28,279.33	
<hr/>			
EXPENSE			
Annual Meeting Expense	\$	102.66	
Awards, Contests & Literature		1,005.96	
Ad “The Sooner Medic”		75.00	
Entertainment		140.00	
Equipment		1,029.54	
Hospital Insurance		20.80	
Medical Service Society Expense		83.98	
Meetings & Dinners		917.64	
Membership Account	10,000.00		
Newsletter		472.13	
Newspaper		1,199.30	
Photos		33.84	
Postage		723.00	
Public Speaking		150.00	
Radio		830.00	
Records		15.00	
Salary	3,330.00		
State Unemployment		68.85	
Stationery, Supplies & Office Expense		557.36	
Social Security		25.50	
Telephone and Telegraph		1,021.85	
Travel		1,201.24	
Visual Education		1,124.43	
Women’s Auxiliary		1,000.00	25,128.08
<hr/>			
Revenue over Expense			\$ 3,151.25

OKLAHOMA STATE MEDICAL ASSOCIATION

Executive Office—210-212 Plaza Court, Oklahoma City, Oklahoma. Phone 7-0976.

OFFICERS

President: George H. Garrison, M.D., Oklahoma City
 Vice-President: H. Violet Sturgeon, M.D., Hennessey
 President-Elect: Ralph A. McGill, M.D., Tulsa
 Secretary-Treasurer: Lewis J. Moorman, M.D., Oklahoma City

Speaker of the House of Delegates: L. Chester McHenry, M.D., Oklahoma City

Vice-Speaker of the House of Delegates: A. R. Sugg, M.D., Ada

Delegates to A.M.A.: John F. Burton, M.D. and James Stevenson, M.D.

Alternate Delegates: Malcom E. Phelps, M.D., El Reno; and Finis W. Ewing, M.D., Muskogee.

COUNCILORS AND VICE-COUNCILORS

District No. 1: Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, Washington.—F. S. Etter, M.D., Bartlesville (C) 1950; J. E. Highland, M.D., Miami (V-C) 1950.

District No. 2: Kay, Noble, Osage, Pawnee, Payne.—L. A. Mitchell, M.D., Stillwater (C) 1951; J. W. Francis, M.D., Perry (V-C) 1951.

District No. 3: Garfield, Grant, Kingfisher, Logan.—Bruce Hinson, M.D., Enid (C) 1952; C. M. Hodgson, M.D., Kingfisher (V-C) 1952.

District No. 4: Alfalfa, Beaver, Cimarron, Ellis, Harper, Major, Texas, Woods, Woodward.—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 5: Beckham, Blaine, Canadian, Custer, Dewey, Roger Mills.—O. C. Standifer, M.D., Elk City (C) 1951; A. L. Johnson, M.D., El Reno, (V-C) 1951.

District No. 6: Oklahoma.—R. Q. Goodwin, M. D., Oklahoma City (C) 1952; W. W. Rucks, Jr., M.D., Oklahoma City (V-C) 1952.

District No. 7: Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, Seminole.—Ned Burleson, M.D., Prague (C) 1950; W. T. Mayfield, M.D., Norman (V-C) 1950.

District No. 8: Tulsa.—M. J. Searle, M.D., Tulsa (C) 1951; W. S. Larrabee, M. D., Tulsa (V-C) 1951.

District No. 9: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner.—Shade Neely, M.D., Muskogee (C) 1952; F. R. First, Jr., M.D., Checotah, (V-C) 1952.

District No. 10: Haskell, Hughes, Latimer, LeFlore, Pittsburg.—Earl M. Woodson, M.D., Poteau (C) 1950; E. H. Shuller, M.D., McAlester, (V-C) 1950.

District No. 11: Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha.—W. K. Haynie, M.D., Durant (C) 1951; L. E. Gee, M.D., Broken Bow, (V-C) 1951.

District No. 12: Carter, Garvin, Johnston, Love, Marshall, McClain, Murray, Pontotoc.—J. H. Veazey, M.D., Ardmore (C) 1952; W. T. Gill, M.D., Ada (V-C) 1952.

District No. 13: Caddo, Comanche, Cotton, Grady, Jefferson, Stephens.—J. L. Patterson, M.D., Duncan (C) 1950; H. M. McClure, M.D., Chickasha (V-C) 1950.

District No. 14: Greer, Harmon, Jackson, Kiowa, Tillman, Washita. L. C. Livingston, M.D., Cordell (C) 1951; J. B. Hollis, M.D., Mangum (V-C) 1951.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE JOURNAL JACKET

Those who read *The Journal* regularly will be interested in the new cover design.

The members of the Editorial Board believe that an attractive, dignified cover carries reader appeal and helps to give *The Journal* its rightful place among the official publications of other State Medical Associations.

Credit for the artistic arrangement of the title and the Association Seal goes to the Editorial Assistant, Miss Mary Lou Crahan, and her consulting artist.

The color of the solid background may be changed from time to time to please the eye and avoid monotony.

The readers of the Journal may rest assured that the Editorial Staff is ever giving more serious attention to what comes between the covers and that comments and criticisms are welcomed.

YOUR COUNCIL MEETING

How enlightening it would be if all the members of the State Medical Association could attend the Council meetings and see and hear the earnest deliberations of this body.

If this were possible, the membership would be better informed and better satisfied with the work of the Association. They would be surprised to learn of its many interests and proud of the way its obligations are being met. With full information about the many activities carried on by the officers, committees, executive staff and office personnel there could be no question as to the necessary expenditures.

The wisdom of those who plan the program and make the budget is proved by the results achieved.

The dues paid are relatively small and those who understand the function of organized medicine and are familiar with the work of our own State Association never complain of the cost. Those who voluntarily do much of the Association's work with-

out monetary remuneration should have the wholehearted support of the membership.

In the last analysis the future of medicine depends upon the individual members of the profession. Our ability to preserve the traditional integrity of medicine will depend upon our response to a changing world. With a broad vision and a wise tolerance we must meet the present mass psychology with reference to socio-economic conditions. The public must be convinced that we are going to solve the problem of medical care. While the weight of our influence must be felt by the patient in the patient's home and in our respective communities, it is equally important to see that it channels through the agencies of organized medicine. The Council, the House of Delegates and the executive office must have material as well as moral support. Through these agencies we must supplement our efforts to educate the patient by education of the public. As Plato suggested, we must make education so perfect and so effective that legislation will be superfluous.

PHYSICIANS INCOME

The office of Business Economics of the U.S. Department of Commerce and the Bureau of Medical Economics Research of the American Medical Association started a study to gather information about physicians' incomes. The Board of Trustees of the American Medical Association authorized cooperation with the U.S. Department of Commerce. It is claimed that this survey has nothing to do with the Department of Internal Revenue. It is understood that more than 125,000 physicians will be canvassed. Apparently there is no reason why physicians should not cooperate fully.

The importance of a cross section of physicians' incomes is conceded. Particularly is it desirable for physicians in the lower income brackets to respond when the blanks are received.

EUTHANASIA

Apropos the recent widespread interest in mercy killing we copy the following from the *Journal of the Kansas State Medical Society* and gratefully acknowledge our indebtedness to our worthy neighbors:

"The Council of the Kansas Medical Society, at a meeting held March 5, passed a resolution on the subject of mercy killings. The resolution was subsequently released to the press and radio stations in Kansas and received wide publicity. The text is as follows:

"The physician upon completing his training Promises to uphold the ideals of the ancient oath of Hippocrates by saying, ' . . . I will give no deadly medicine to anyone if asked, nor suggest any such counsel . . . '

"He is dedicated to the preservation of life — he has neither professional, nor legal nor moral right to willfully cause the death of any person.

"The Council of the Kansas Medical Society reaffirms the position of the medical profession to serve humanity in the prevention and cure of disease, in the prolongation of life and without qualification condemns the practice of mercy killings."

1. *Journal of the Kansas Medical Society*, Vol. LI, No. 5, May, 1950, page 241.

CORTISONE AND A.C.T.H.

Six months ago in an editorial appearing in this *Journal*, the writer ventured to say, no phase of this therapeutic puzzle is "so acute that the profession at large cannot await further investigation in this highly specialized field. The physicians' reputation and the patients' welfare should have careful consideration before treatment is initiated."

The phenomenal effects of this new therapeutic agent upon the human organism and many of the pathological conditions which assail it have astonished the medical world, aroused unwarranted hope in the hosts of affliction and serious cogitation among the more conservative members of the medical profession.

Astute endocrinologists witness medical miracles approaching those of Divine origin and marvel at the strange phenomena and their inability to interpret and explain what is going on in an organism more complicated and more mysterious than they had imagined. One of the most renowned in this specialty said, "How puzzling this new

therapy which helps everything and cures nothing."

It is astounding to see the otherwise helpless victims of arthritis after a brief period of treatment go up and down steps like a Greek athlete and then following the omission of a few doses it is equally astounding to see them ease over the steps like a stray dog after having been chewed up in the market place. What a painful disappointment.

There are many side effects as illy defined and poorly understood at those operating directly upon the pathological conditions.

The following from a well known and highly respected internist deserves careful consideration. After the recent meeting of the Association of American Physicians at Atlantic City this great clinician said, "Judging from the papers presented, the sun of enthusiasm over cortisone and A.C.T.H. definitely is beginning to sink so far as its use as a remedial drug is concerned and the twilight of uncertainty is commencing."

No doubt much research and good will come out of this uncertainty. In the meantime physicians should make sure no harm is done with this uncertain therapy.

MEDICINE IN THE NEWS

When Dr. Leonard Scheele, Surgeon General of the United States, presented the 1949 Lasker Award for medical reporting to William L. Lawrence of the New York Times, he made this significant statement:

"Medical science has never before so much needed the responsible and accurate writing in the newspapers and magazines."

It is doubtful if ever before there has been so much medical writing for newspapers and magazines. The phenomenal progress in medicine should be reported, but by informed conservative reporters.

The daily papers and the popular magazines are full of premature medical publicity. Because of this the *Journal* carries a department for the purpose of listing, reviewing and criticizing some of the articles of importance to physicians and patients appearing in popular magazines. The chief object of this department is to alert physicians as to what their patients may be reading, whether good or bad.

BABIES FOR ADOPTION

If state laws fail to provide protection for babies born out of wedlock; if human depravity overrides popular opinion to the point of operating a shameful adoption racket in the very midst of our good citizens, let us hope that no members of the State Medical Association are implicated, innocently or otherwise.

Regardless of moral issues and notwithstanding man-made laws these innocent infants are human beings and entitled to humane consideration. The responsibility of doctors who bring them into the world does not end with their birth. All physicians who have any connection with these maternity homes with adoption schemes or who are drawn into them for needed professional services should know what is going on, and keep their hands and hearts clean. Their obligations reach from the newborn babe through the public to the profession. The welfare of the child, the reputation of the community and the good name of the medical profession may depend upon the doctor's actions. His knowledge, his influence and his energy should be employed in behalf of the legitimate handling of illegitimate children. The good citizens of the state and their elected lawmakers may count on the physicians who are rightfully entitled to the designation of M.D., for support of proper regulatory measures. At the same time all true physicians would appreciate protection against quacks and impostors who pose as doctors without the legal title of M.D. According to recent newspaper reports some of the adoption rackets are in the hands of such so-called doctors. Apparently there is no way to definitely clarify in the public mind the meaning of the widely employed and seriously overworked designation, "Doctor". Present laws provide that in the healing arts the unauthorized employment of the term makes the guilty party subject to prosecution and penalty.

THE DOCTORS HELPED TOO!

Under this title we received the following statement from Dan Hollingsworth, who is the genial and efficient manager of the Oklahoma City Safety Council. Having won first place in its own group twice in succession, Oklahoma City also won the 1949 Grand Award in competition with all the cities in the United States, tying with Lan-

sing, Michigan. Mr. Hollingsworth's special recognition of the part played by the medical profession is greatly appreciated.

"We must admit that were it not for the advances made in the medical field and the interest shown by the medical profession our present street and highway death rate would be much higher than it is.

"Policemen, who have been picking up the pieces for a goodly number of years, recall that today the doctors are saving many lives in emergency rooms and operating rooms of our hospitals in injury cases which, 15 or 20 years ago, were not saved. This is particularly true in shock and head injuries.

"The topic of what the medical profession can do today in the traffic accident injury case is common among police groups. For example: in the keeping of records on serious injury cases one 'off the record' listing is 'expected to die'. When a youngster is seriously and critically injured and alive at the end of 48 hours, that person is removed from the 'expected to die' list.

"In a light, but complimentary, way, many police groups kid with each other that one town has a better safety record than another one, because they have better doctors. But when honors come the cooperation and services of many individuals and groups are publicly acknowledged, the doctors are never mentioned."

FEAR AND WANT

How foolish to wish upon a people still struggling for physical competency the illogical concept of fear and want. These two words serve as the buttresses to the master word — work. Sir William Osler not only bestowed this name upon the wonder word but he animated it with his restless critical intellect ever surging for more knowledge with which to feed the souls of people who suffer from fear and want.

He knew that the only sustaining nutriment must come through work. It was his task to make use of every golden moment in order that he might pass the stimulus on to others. Today he lives in the hearts and minds of millions because he knew the value of the master word — because he worked. It is better to die striving than to live surfeited with the earnings of other people.

SCIENTIFIC ARTICLES

SELECTION OF BLOOD DONORS

J. DEWITT FOX, M.D.*

LOS ANGELES, CALIFORNIA

The therapeutic value of any blood transfusion is determined by the donor's state of health and the quality of his blood. The blood must not only be compatible with that of the recipient but also of such quality as to benefit the patient.¹⁹ Because every blood donor may potentially be a source of disease, the health of the donor should be perfect. Every safeguard should be taken to eliminate any donor who is harboring a latent infection, early blood dyscrasia, or is in a state of lowered general health.

With the return of the professional blood donor, and the disappearance of the volunteer donor who gave blood without the need of financial return, has also come the need for more objective evaluation of blood donors. Subjective examination and cursory hemoglobin and serological tests are not sufficient to screen out the unscrupulous professional donor urgently in need of funds. Therefore, every means should be employed in examining the donor and in the laboratory evaluation of his blood to make certain recipients do not receive blood from a donor carrying a masked, asymptomatic disease.

Formerly, direct transfusion methods gave the physician administering the transfusion an opportunity to examine the donor. Today, the average donor has no contact with the recipient and rarely sees the physician administering his blood. Instead, 1,650 blood banks impersonally service more than 1,000,000 pints of blood yearly, a blood transfer involving one million recipients who have no personal knowledge of the identity, race, age, sex or health of the donor. This responsibility rests with the blood bank and physician to closely screen all donors.

DISEASE TRANSMISSION BY TRANSFUSION

The importance of cautious donor selection is pointed up by the danger of disease transmission by transfusion, a complication long feared by physicians. This apprehen-

sion stems from the reports in the medical literature of the transmission of leukemic blood,⁷ syphilis,^{14 19} malaria,^{6 14 19} measles,^{1 9} smallpox,² septicemia,¹¹ typhoid fever,¹² gonorrhea,¹³ influenza,¹⁵ relapsing fever,² allergic hypersensitiveness,¹⁴ from donor to patient by transfusion.

Because of its high incidence, 4.5 to 7.2 percent, infectious hepatitis (homologous serum jaundice) has posed a special problem in plasma transfusions. Hartman¹⁰ has recently devised a new technique for destroying the virus by treating whole blood and plasma with nitrogen mustard, materially reducing the danger of this complication. Plasma is being treated in some centers with ultraviolet irradiation which has also proven effective against this virus disease.²⁰

But until some universally effective method of blood sterilization is available, the selection of blood donors is the most effective preventive measure against transmittable disease. Every scientific means should be utilized in eliminating the donor harboring latent disease.

PHYSICAL REQUIREMENTS OF DONORS

The physical examination of blood donors is often inadequate. Frequently, because the donor is a relative or friend, the physician is reluctant to ask him to submit to a physical examination. However, Wiener¹⁹ has traced most of the cases of syphilis transmission to the so-called "family" donor. "Prospective donors, whether professionals, friends or relatives should be questioned regarding the possibility of transmissible disease and subjected to a *careful* physical examination."¹⁴

In California, the objective of a donor's health are: weight, blood pressure, temperature, hemoglobin, and a negative serological reaction for syphilis. The donor's subjective statements are used as the primary basis for his eligibility. The form below is one fulfilling the California Administrative Code requirements.

*From the Department of General Surgery, Division of Oncology, College of Medical Evangelists School of Medicine, Los Angeles, California.

BLOOD DONOR

Use ink or indelible pencil

Please answer accurately for your benefit and that of the patient who receives your blood.

Any chronic or serious illness?..... If so, what?..... Illness in last month?..... Cold within a week?..... Were you in Armed Forces?..... If so, where stationed?..... Any form of heart trouble?..... Malaria?..... Undulant fever within 5 years?..... Diabetes?..... Jaundice at any time?..... Clinical pulmonary tuberculosis?..... Pregnant or post partum 9 months?..... Have you given blood?..... If so, last date?.....

Donor's Signature

"It is the general practice to accept as blood donors both men and women between the ages of 18 and 60 who assert that they are in good health. Physical examination is usually very superficial . . ." but "inspection of the male genitalia for chancre should be obligatory."¹⁸

Because the viability of the malaria parasite is longer than 96 hours⁶ in stored bank

blood, all donors who have ever had malaria should be rejected. At present, the donor's history is the only check made, very few blood banks do malarial blood studies.

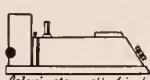


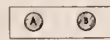
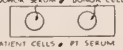




LABORATORY EXAMINATION OF BLOOD

PRIOR TO TRANSFUSION



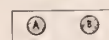
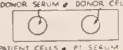




Most hospitals make rather extensive blood studies of a recipient's blood, but blood banks do not examine a donor's blood microscopically before transfusion. The tests usually made on a patient's blood are: (1) a serological reaction, (2) a hemoglobin determination, (3) a complete blood study including erythrocyte count, leukocyte count, stained differential blood smear, and before transfusion (4) typing and cross-matching, (5) Rh typing.

A donor's blood receives *no microscopic examination*. In California⁴ it receives these macroscopic tests: (1) hemoglobin determination, (2) serological test, (3) typing and cross-matching. The recipient's blood receives more careful microscopic scrutiny than the donor's blood which is to be mixed intravenously with the recipient's. At present, no leukocyte count, erythrocyte count

RECIPIENT

MACROSCOPIC	
1. Hemoglobin	 <i>Usually by Colorimeter method in hospitals.</i>
2. Serology	
3. Rh Typing	
4. Routine Typing	
5. Cross Matching	
 6. ERYTHROCYTE COUNT	
7. LEUKOCYTE COUNT	
8. DIFFERENTIAL SMEAR	

DONOR

MACROSCOPIC	
1. Hemoglobin	<i>By Van Slyke specific gravity method.</i>
2. Serology	
3. Rh Typing	
4. Routine Typing	
5. Cross Matching	
 6. ERYTHROCYTE COUNT	
7. LEUKOCYTE COUNT	
8. DIFFERENTIAL SMEAR	

Not Done at Present

or examination of a stained differential smear is made on a donor's blood sample.

The most popular hemoglobin determination in blood banks is the rapid Van Slyke specific gravity method. In this test, a drop of donor's blood is allowed to fall into a standardized solution of copper sulphate. The drop of blood will sink rapidly if it is normal or *above* normal in hemoglobin content.

One shortcoming of this test is that it does not disclose diseases in which hemoconcentration or hyperproteinemia exists, i.e., polycythemia rubra vera, multiple myeloma, dehydration and other diseases having a hyperproteinemia. In polycythemia rubra vera the blood specific gravity varies between 1.075 and 1.080 and would readily pass the Van Slyke test for normal hemoglobin.

The blood of a dehydrated alcoholic or undernourished donor frequently gives a normal hemoglobin reading by the Van Slyke method. Actually the donor may be anemic, hemoconcentration and dehydration accounting for the high specific gravity of the blood. Therefore, a microscopic blood study is indicated in such donors who often appear at commercially operated blood banks in the "skid row" districts of larger cities.

IMPORTANCE OF DIFFERENTIAL BLOOD SMEAR

The stained differential smear would materially aid in evaluating a donor's health. It would help to uncover asymptomatic illness during its latent or incubation period. A leukemia patient, for example, may be a robust person in good health prior to the appearance of anemia.¹⁷ And only a differential slide study will detect leukemia in its earliest phases.⁸ Diseases showing alterations in the morphology or number of leukocytes prior to the appearance of symptoms would be discovered by this study. Into this category fall such diseases as infectious mononucleosis, tuberculosis, virus infections, childhood diseases — whooping cough, measles, mumps, chicken pox.

The blood donor harboring a latent infection could be spotted by a Shilling "shift to the left," leukopenia, or relative lymphocytosis on the blood smear.

The stained differential smear is also of medico-legal value. The blood bank careful enough to file the slide preserves a record of the donor's blood picture at the time of donation. Should a question ever arise re-

garding the donor's health, the blood bank may produce the slide — a far more valuable piece of evidence than a typewritten report.

RECOMMENDATIONS

To further safeguard the recipients of blood transfusions and to elevate the standards of blood banks, a closer screening of blood donors is advocated. The following are recommended as adjuncts to standard blood bank procedures:

1. *Medical History*: The practice in most blood donor stations of having a female technician ask routine questions of the male donor is apt to place him on the defensive. His desire to make a good medical record will be especially apparent if he is a professional donor in need of funds. He will usually answer questions regarding transmittable disease in a manner which will benefit him — not the patient.

An inquiry into the symptoms of a disease may frequently disclose a positive history. Whereas the mere asking: "Have you ever had syphilis?" will draw out a negative reply. Questions regarding penile or skin lesions, periodic chills and fever, night sweats or persistent cough, yellow discoloration of the skin, extreme thirst or sugar in the urine, and shortness of breath are more likely to be answered in the affirmative should syphilis, malaria, tuberculosis, infectious jaundice, diabetes, or heart disease be in the patient's medical history. Male technicians should question male donors.

Specific questions regarding blood dyscrasias should be asked: "Have you ever had swellings of the glands in your neck, under your arm, or in the groin? Painful enlargement of any organs in the abdomen, i.e., liver or spleen? Any bleeding tendency? Blood disease in your family? Leukemia? Polycythemia? Has your skin ever been dusky or bluish in color? Cancer in any organ or the blood?"

The ultimate aim, to make the evaluation of the blood donor as objective as possible, is difficult to achieve by history alone.

2. *Physical Examination*: This must be brief, but should be a part of the screening process. To facilitate such an examination, donors of the same sex should disrobe and be examined under good light. A physician can rapidly pass along a line of donors examining them for mouth and throat lesions; their skin for infectious lesions or exanthemata; cervical, axillary and inguinal

regions for lymphadenopathy; the abdomen for splenic or hepatic enlargement.

3. *Microscopic Examination of Donor's Blood*: The stained differential blood smear is the most important single examination which can be made on the donor's blood. The only method which detects early leukemia, it may also uncover latent infectious processes. It offers information regarding the quality of erythrocytes which cannot be obtained by the Van Slyke specific gravity hemoglobin determination. Hypochromia, hyperchromia, anisocytosis, poikilocytosis, nucleated red cells, and rough estimation of the number of platelets may only be observed on a stained smear.

Any procedure which artificially places a new variety of blood into a patient's veins should include every precaution to ascertain the state of the transfused blood cells. The stained differential smear is the best means now available for obtaining this information.

The rewards for such a microscopic blood study would be: (1) To provide the blood bank and physician with a definite blood picture and indication of the donor's health at the time of blood donation. (2) To assure the donor of his own health. (3) To eliminate donors with latent infections. (4) To provide a permanent medico-legal record of the donor's blood picture. (5) To assure the recipient that the blood he receives is of such a quality as to benefit him and has been examined by every known scientific means to assure that safety.

4. *Ultra-violet Blood Irradiation*: The irradiation of plasma has been found effective against the virus of infectious hepatitis (homologous serum jaundice).²⁰ It may be found lethal to other viruses latent in bank blood, i.e., common cold, influenza, childhood diseases. Studies should be made to determine the feasibility of irradiating whole blood used for transfusion.

CONCLUSIONS

The selection of blood donors should be on an objective basis, so far as possible. The carelessly examined blood donor, whose subjective history is the basis for his eligibility, is potentially dangerous. His blood, if used for plasma pooling, can spread disease to hundreds should he be harboring a disease such as homologous serum jaundice in its incubation period. Therefore, every precautionary measure should be instituted to screen out the blood donor harboring latent disease.

Physical examination and the differential stained blood smear are advocated as objective criteria for the closer screening of blood donors.

SUMMARY

The carelessly selected blood donor is potentially dangerous. The transmission of disease by blood transfusion cannot be minimized. Objective criteria must be used in selecting the professional blood donor who is in need of funds, for his subjective history cannot always be relied upon. Therefore the following safeguards are recommended: (1) Medical history based on symptoms. (2) Physical examination of all donors, professional, relative or friend. (3) Microscopic study of donor's blood. (4) Possible use of ultra-violet irradiation of blood used for transfusion.

The differential blood smear is the most important single blood examination to evaluate the donor's health. It is invaluable in unmasking latent infectious diseases and blood dyscrasias.

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PARASITIC DISEASES AND PROBLEMS IN DIAGNOSIS*

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The term "parasitic disease" is so broad it requires defining. In this paper it will be applied to the protozoa and worms parasitic in man. The number of diseases to be considered will be limited further by confining the discussion to the forms indigenous to this state.

Malaria is the most important parasitic disease of man. When the various states are arranged in order by the number of cases of malaria it is interesting to note that in recent years Oklahoma has changed from ninth to fourth or fifth place. This is not as ominous as it sounds. Actually malaria is decreasing in the state and the change in our relative position is due in part to effective control programs in states with a greater malaria problem.

As far as parasites are concerned, it is believed that the intestinal forms are the biggest problem in Oklahoma. They are common certainly and are overlooked often. As a general rule making a laboratory test for parasites is not a popular pastime. It is time consuming and smelly. There are relatively few people who have received adequate training in the techniques and have had practice enough in the differentiation of the organisms. This applies particularly to *Endamoeba histolytica*. As a result many feel that they are not prepared to make a satisfactory diagnosis, so why bother. It happens sometimes that a diagnosis is made by a qualified person and the patient takes this information to his physician. The patient is asked if he has symptoms of dysentery. Usually the answer is "No", so the matter is either dropped or a sample is turned over to the office girl-technician and the report is apt to be negative. If a physician decides to have stool samples done routinely a large number of them will be reported as negative, or as having only

non-pathogenic forms present. He may get the impression that the tests are not worthwhile. As far as the patients are concerned the laboratory tests are expensive so the doctor must select the patients most apt to benefit by them. This offers a difficult problem because the symptoms are vague generally, and non-specific.

Before going further in this vein it might be well to look at some of the information we have on the prevalence of these parasites in Oklahoma. Some data that have never been published are available, and I will take this opportunity to present them. From 1939 to 1943, at the University of Oklahoma School of Medicine, we examined samples from 4,660 Oklahomans. The survey was started in school children in the eastern part of the state (McMullen and Gray, 1941). Later nearly 2,000 samples were obtained from school children in and near Oklahoma City. The school districts in the city were selected so that we had samples from the worst areas, up to the best.

It is well known that school children carry more parasites than adults. To get a more representative sample of the population, university students and miscellaneous adults were examined also. All but six counties of the state were represented in our series. Most of the people examined were whites but Indians and Negroes were included also. The group examined did not represent a cross section of our population but it included certainly a great many persons who will come in to see a doctor.

The samples were sent to the laboratory as quickly as possible and most of the work was done in the cooler months. The zinc sulphate floatation-centrifugation method of concentrating the parasites was used on all samples and the smears were stained with D'Antoni's iodine solution. Usually only one sample was examined from each person. It must be remembered that if additional

*Presented by invitation before the Laboratory Section at the Annual Meeting of the Oklahoma Public Health Association, Oklahoma City, December 15-17, 1949

samples had been examined more cases would have been found. The figures given below, therefore, must be considered minimal.

One or more species of parasites were found in 49.7 percent of the persons examined. Out of the 2315 positive stools there were 3452 parasitic infections. This difference was due to multiple infections. Double infections were common. Triple and quadruple infections were not rare and several stool samples contained five different parasites. In some of the latter there were sometimes three pathogenic forms. As would be expected most of the infections were those of *Endamoeba coli* and other non-pathogenic protozoa. When it is understood that these forms can be acquired only by eating materials contaminated with feces, the knowledge of their presence is of interest from a health standpoint.

Of the pathogenic forms, 206 persons were found to have *Endamoeba histolytica*, 397 with *Giardia lamblia*, six with *Strongyloides stercoralis*, 65 with hookworm, six with *Ascaris lumbricoides*, four with *Trichuris trichiura*, two with *Taenia* sp., 143 with *Hymenolepis nana*, and one with *Hymenolepis diminuta*. Sixty-three of the stools contained the eggs or adults of pinworm. As you know, stool samples are of little value in detecting the presence of this parasite. Smith and Richardson (1947), two senior medical students, examined 117 children in Crippled Children's Hospital in Oklahoma City, using the scotch tape swab, and found 33.3 percent infected with pinworm. It is possible that this rate was higher than would be found in the general population, but it is safe to assume probably that 500 to 1000 of our 4,660 persons had pinworm. A total of 793 infections that deserve medical attention actually were found. If you add the number missed because only one sample was examined, and the probable number of pinworm cases, the total is rather surprising.

By breaking down the group in various ways it is possible to find out where to look for most of the infections. When the sexes are compared the incidence is about the same. In rural areas the incidence was 54 per cent, as against 45 percent in urban districts. When separated by races the Indians had the highest rate with 67 percent. The incidence in Negroes was 50 percent and in whites 46 percent. The difference between whites and Negroes was not

significant. When examined by age groups we found the highest rates in school- and teen-aged children. The pre-school aged children had the lowest rates.

A comparison of the various school districts in Oklahoma City gave some interesting results. At Walnut Grove School, in the poorer part of the city, 72.1 percent of the children were found to be infected. At Wheeler School, the incidence was 50.8 percent; Irving School, 34.8 percent; Whittier School, 29.6 percent; and Horace Mann School, 26.2 percent. The latter is in the newer, more modern part of the city. Even there more than one out of four youngsters was infected. At Britton, just outside the City limits, the incidence was 35.1 percent. By comparison, 34.9 percent of the students at the University of Oklahoma Medical School were infected with intestinal parasites.

It will be noted that the most prevalent parasites present in this state are those that are transferred directly, i.e., the protozoa, pinworm and dwarf tapeworm. The cysts of the protozoa and the eggs of the two worms are infective as they leave the body. They are easily passed from person to person in families, at school and by food handlers. The parasites such as, hookworms, *Strongyloides*, and *Taenia* that require development in the soil or in intermediate hosts, are relatively scarce in the state.

The results of this survey and those of Gregg and McClintock (1947) in southeastern Oklahoma emphasize the fact that parasites are relatively common here. It follows, therefore, that if we do not find them in our examinations something is wrong. It is granted that we need better methods for examining stool samples and simpler ways of distinguishing between the pathogenic and non-pathogenic protozoa. Until these have been discovered we must use the best we have. There are three general methods now in use. Time can be saved and the accuracy of the diagnosis can be increased if these are used intelligently. They are as follows:

1. Direct smear — Primarily of use in looking for the trophozoites of protozoa in samples that are still warm, liquid or semi-liquid in nature. They should be examined in warm saline or stained with hematoxylin.

2. Zinc sulphate floatation-centrifugation — An excellent method for concentrating cysts, eggs and larvae. The smear made from the floated material is stained with D'Antoni's iodine solution.

3. Culture — Useful in the diagnosis of *E. histolytica*. This method is being used more widely, especially in cases difficult to diagnose by the first two methods. It requires more time than the above but it picks up a larger number of cases.

In summary it can be said that intestinal parasites are relatively common in Oklahoma and are missed often when the fecal samples are examined. Some of these deficiencies could be corrected if better basic training were given to physicians and medical tech-

nologists. The average physician is not convinced that parasites are a problem and that he can do much about them. The average medical technologist does not get adequate training nor sufficient practice to be efficient.

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DANGEROUS POST-PARTUM BLOOD LOSS FROM FIRST DEGREE LACERATIONS

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Since hemorrhage has remained a major cause of maternal mortality (30 per cent to 31 per cent of all maternal deaths, 1945-47) this complication of pregnancy has become, and rightly so, a popular topic of obstetrical papers. These papers practically always stress uterine atonia or inertia, retained secundines and cervical and deep perineal lacerations as the causes of major post-partum hemorrhage endangering the life of the patient. Rarely are minor, first degree lacerations mentioned or, if so, they are passed over briefly without discussion.

It is the purpose of this writer to discuss the danger of hemorrhage from minor, first degree lacerations, lacerations that are frequently described in delivery notes as "insignificant, mucosal laceration, repair not necessary" or lacerations that are missed entirely in a rapid examination of the perineum following spontaneous delivery. A case is presented as an example of this danger.

The common site of first degree lacerations are illustrated in Figure 1. They are: (1) posterior fourchette, (2) lateral vaginal wall, (3) labia minora, (4) area surrounding the urethral orifice and (5) prepuse of the clitoris. Usually mucosal separation in these areas will cause little or no bleeding and, as a result, are rarely repaired. They have a tendency to heal readily and prac-

tically never become infected. Because of the insignificance of these tears the obstetrician and general practitioner inspects them briefly and may not take the time to wait to see if they continue to bleed, or else the separation is so small that it is missed entirely.

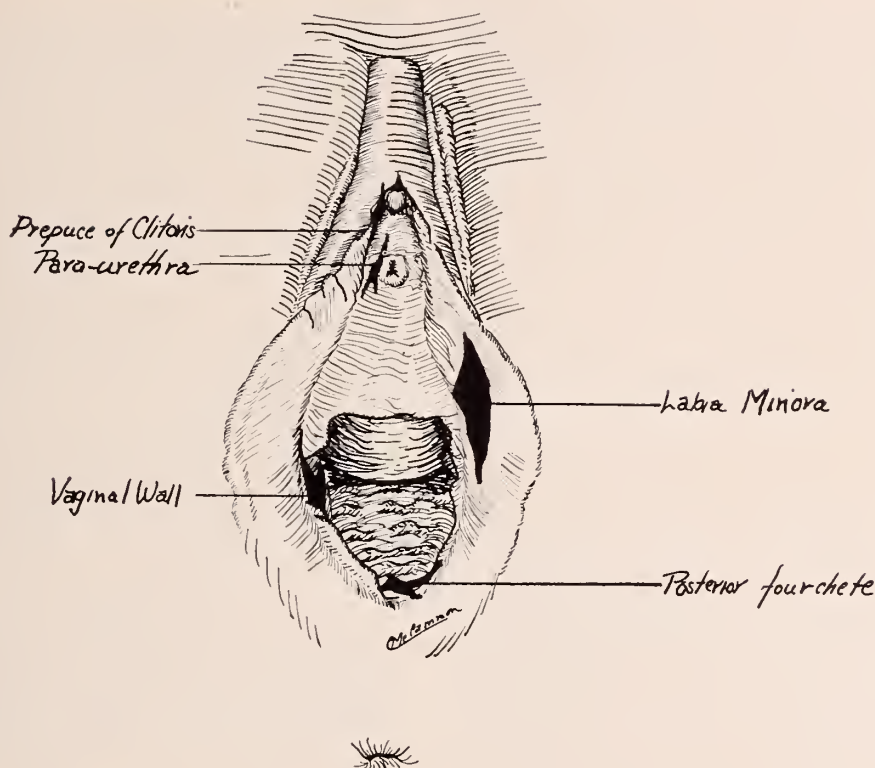
Occasionally, however, these minor tears will be through a varicose vein and bleeding will continue until controlled by compression or ligation. In relation to the lacerations listed above these varicosities are usually found at the posterior fourchette, vaginal wall and labia minora.

The laceration near the urethral orifice or in the area of the clitoris may be into one of the many superficial, dilated venules. The vestibular bulbs which lie under the bases of the labia minor and meet under the clitoris are masses of highly vascular tissue. The blood supply to this area is so generous, especially during pregnancy, that the operator frequently finds he has perforated a second vessel with his suture needle and must place a second or even a third suture before all bleeding is controlled.

The following case demonstrates the dangers just described:

M. B. a 21-year-old Navajo woman, gravida two, para one, was admitted to the obstetrical service on April 11, 1949. Although her L.M.P. was June 10, 1948, mak-

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Most Common Sites of First Degree Lacerations

ing her E.D.C. March 17, 1949, it was felt after examination that she was not at term and that the expected date was probably after the 15th of April. Because her home was in an isolated area of the reservation she was permitted to remain in the hospital to await labor and delivery. Spontaneous labor had not taken place by April 30, 1949, so medical induction was successfully initiated.

After an easy labor of five hours, rectal examination revealed the cervix to be effaced, eight centimeters dilated with the vertex presenting as a ROT at the level of the spines. She was transferred to the delivery room where, after the usual surgical preparation, she delivered spontaneously an apparently normal female infant weighing seven pounds and two ounces. The placenta was delivered immediately as a Schultz. Ergonovine and pituitrin were given intramuscularly to maintain good uterine contraction. Blood loss was mild, and the patient was returned to the ward in good condition. Examination of the perineum following delivery had revealed no lacerations. Delivery occurred at 5:30 p.m., April 30, 1949.

There is described in the Nurses Notes during the next 16 hours that "there was slight bleeding" that "the uterus remained firm." However, it was noted with each perineal care that small, fresh blood clots were passed. It was necessary for the writer to be out of town for six hours the following afternoon and, the ward nurse discovering many large clots and fresh bleeding at 2:00 p.m., called another physician to see the patient. The patient was given vitamin K intramuscularly, intramuscular ergonovine and an ice pack was placed abdominally above the fundus, which was described as being moderately firm. Two hours later a second physician was called to see the patient because of continued bleeding. He was not impressed by the amount of bleeding but gave pituitrin intravenously and massaged the uterus for a few minutes. His note stated that the uterus did not feel spongy.

One hour later when the writer returned the situation was explained to him. At this time the patient complained of feeling weak and cold and she was thoroughly frightened by her continued bleeding. Intravenous fluids were started while she was typed and

cross-matched for a transfusion. The blood pressure at this time was 90 50 and the blood hemoglobin value was nine grams per cent. She was taken immediately to the delivery room and prepared for sterile examination. It had been noted previously that she was not having profuse bleeding and at no time had the fundus been described as spongy. With these facts in mind, it was thought that she was probably bleeding from a cervical laceration. Under nitrous oxide and oxygen anesthesia the cervix was exposed and carefully inspected. No laceration was found and it was further noticed that there was no bright bleeding from the fundus. At this time it was discovered that fresh blood was collecting on the upper surface of the superior blade of the speculum. The uterine cavity was examined satisfying the operator that there was no retained placenta or membranes. Examination as to the source of external bleeding then revealed a 0.5 centimeter laceration of the inner fold of the prepuce of the clitoris. Bleeding was in a small, steady flow but it was easily controlled by one figure of eight suture of 000 atraumatic chromic catgut.

The patient was transfused to replace her blood loss. The remainder of the post-partum course was uneventful and she was discharged in good condition on her fifth post-partum day.

COMMENT

It is felt that the bleeding in the above case failed to stop either because the vessel

was incompletely severed and could not retract or the mucous membrane separation was so shallow that the vessel could not retract and form a clot, or else the clot was removed each time the patient received perineal care. The failure to form a clot because of inability to retract seems the most likely explanation for the continued bleeding.

Even with first degree lacerations of the perineum good obstetrical technique means "save blood"; good surgical technique demands immediate repair of lacerations to prevent blood loss and to encourage rapid, primary healing.

SUMMARY

A brief discussion is presented on the dangers of minor, first degree perineal lacerations, and a case is presented to demonstrate these dangers.

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THE TREATMENT OF CLUBFOOT

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The purpose of this paper is to present certain factors in the treatment of clubfoot which in the author's experience have been important in reducing the tendency to recurrence. The ideas expressed relative to the equinus deformity may or may not be original, but if they have been exercised before it has not come to his attention from a review of the literature or from observing patients under active treatment by other orthopedists.

The proper sequence of the various cor-

rections from the respective component deformities of clubfoot has been presented many times, namely, the forefoot adduction, the ankle varus and, finally, the equinus. Too, it has been stated that it is necessary to overcorrect each of the deformities. But just how far to overcorrect has not been definitely stated.

It is not unusual for orthopedists to see feet which have been sufficiently corrected to meet with the above definition, only to have a high percentage of recurrence with

subsequent castings necessary. The process may have been repeated until the patient was too old to be benefited by further manipulation and then surgery became the only resort.

It would appear that the greatest error in the treatment of clubfoot among orthopedic surgeons is not a lack of thorough understanding of the pathomechanics, but rather an incompleteness in carrying out the necessary procedures.

It is absolutely necessary to correct the forefoot adduction before attempting equinus correction, as the scaphoid, or its cartilaginous precursor in the infant, lies in an abnormal position on the medial aspect of the head of the astragalus and will be locked tightly against it by dorsiflexing the foot. It will then be impossible to slide the scaphoid anteriorly around the articular surface of the astragalar head. This will not only defeat correction of the forefoot adduction, but in so doing will also preclude correction of the ankle varus. Actually, it has been helpful in some cases to increase the equinus during the initial correction of the adduction, because in so doing the scaphoid is separated from the astragalus and the foot can be mobilized laterally with greater facility.

The final criterion of complete correction of the forefoot deformity lies in the findings on antero-posterior x-ray projection. Correction may be considered complete only when the os calcis has been mobilized laterally to its normal position and is no longer superimposed by the shadow of the astragalus. In the normal position, a line projected through the long axis of the astragalus passes through the first metatarsal.

In this regard, the author once heard a well-known orthopedist tell a group of medical students — in an attempt to simplify understanding of the deformities of clubfoot — that they might consider the astragalus to have been dislocated on the foot. This type of faulty thinking can only lead to faulty therapy. Nothing could be farther from the truth than this explanation for clubfoot. The fact is that the entire forefoot and os calcis are subluxated with relation to the astragalus and the rest of the body. The astragalus is not abnormally positioned, for it is fixed firmly by the ankle mortise. This is proved by noting the changes that take place with correction, for the scaphoid slides around to the front of the astragalus and the os calcis moves from beneath the astragalus, the latter bone mean-

while remaining stationery in regard to the tibia.

Very little need be said about the ankle varus, for if the forefoot deformity is properly corrected, the ankle will automatically swing into valgus as the forefoot swings across the sagittal midline of the leg. It is doubtful whether the ankle varus could be maintained intentionally while overcorrecting the forefoot varus. The reasons for this are as follows. First, the heel must be grasped firmly by one hand and counter-pressure exerted against it while the forefoot is manipulated laterally by the other hand; the midtarsal joint opens medially and angulation of the long axis of the foot takes place at this point. The os calcis is forced to slide from beneath the long axis of the astragalus; however, the displacement that takes place here is less than the angulation that takes place in the midtarsal and forefoot areas. The resultant effect is that the position of the os calcis in relation to the toes is lateral to the leg, this position being maintained by the tight Tendo Achilles. Since the acting upward force lies lateral to the ankle joint, there is a stretching of the contracted soft tissues on the medial aspect of the ankle.

It would seem that these procedures for correction of the first two components of clubfoot are pretty well agreed upon and that they are pretty well effected by most; however, when it comes to the equinus deformity, it would seem that there is undue haste in releasing the patient from plaster. It is not sufficient to carry the foot into "slight" dorsiflexion. Recurrence is too frequent. It has been the rule with the author for some time to be satisfied with nothing less than extreme dorsiflexion. By this is meant dorsiflexion in the valgus position sufficient to enable the fifth toe to touch the leg. This might appear alarming, but is very easy to achieve and can be gained in any child's foot that has been brought to dorsiflexion in excess of 90 degrees. Only a few additional manipulations and castings are required. It is to be advised, however, that in the last few manipulations one should make certain the upward pressure is exerted near the midtarsal joint in order to obviate development of a rocker foot. Once a fair amount of dorsiflexion has been obtained, it is surprising how simple it is to reach the ultimate position.

Since this method has been adopted there have been no recurrences requiring casts.

*Fig. 1, Left**Fig. 2, Right*

The number of cases is admittedly not large, but includes feet treated elsewhere which have recurred following periodic castings. It might be questioned that the correction is extreme enough to produce persistent cancanous or planus; in answer to this, assurance might be given that the foot returns to a normal plantar position all too readily. In one of the older patients it was thought best to have the parents continue stretching the gastrocnemius by gentle manipulation in order to be certain that a return to equinus did not occur.

During the stage of forefoot and ankle varus correction it is advisable to use long leg casts with the knee flexed to 90 degrees. This serves several useful purposes. In the small child, especially in the presence of equinus, it prevents the patient from kicking the casts off. It prevents the patient from standing. Perhaps most important of all, it permits better retention of the correction of the forefoot adductions by limiting internal rotation of the cast on the longitudinal axis of the leg.

True tibial torsion has not been seen. The deformity in clubfoot lies distal and anterior to the astragalus and when this is corrected completely there is a disappearance of what had been an apparent rotation of the tibia.

Retentive braces have not been used in the post-casting period. It has been found sufficient to have the patient sleep in his shoes, which should be of the high top variety. This is to prevent the feet from dropping into plantar flexion during the normal relaxation of sleep. When it is considered that a small child sleeps one-half of each 24 hour period, the importance of this pro-

phylactic measure is apparent. The parents are advised to remove the shoes only for the purpose of bathing and the application of clean stockings. What kind of shoes the patient wears makes little difference so long as it is of the proper size, that it has a firm leather upper and that it has a straight last or slight "toe out". The author has continued to use lateral wedges on the sole and heel. With the strong tendency to recurrence that exists in clubfoot there need be no fear of pes planus.

Correction should be started just as soon as the deformity is recognized, no matter how young the patient. In many newborn infants correction can be readily obtained and the foot held in position by adhesive tape properly applied. It is a rare case that cannot be easily corrected if treatment is begun during the first few weeks of life.

The multiple cast method has been found the most satisfactory for general use. In the larger children the Kite method of wedging has been very helpful and has seemed to provide a certain mechanical advantage in manipulation. It is especially useful in those feet which have been manipulated previously and found stiff at examination. However, it is simpler to remove and replace casts in the small patients than it is to wedge them. The Denis-Browne splint has been found of little value as the sole means of correction, for in the more severe deformities the forefoot adduction and equinus are frequently inadequately adjusted. It does serve to loosen the foot and make it more pliable, but this can just as readily and more simply be achieved by cast application.

In the older children, where ligamentous contractures are so advanced that articular

damage might result from the force of manipulation required to effect any change in position, there are soft tissue procedures which may be of considerable benefit. A typical case is the child between six and 10 years of age who has had a history of repeated episodes of inadequate treatment interrupted by periods of ambulation. The Brockman procedure may be of much help, but failure will be obtained and the procedure criticized unless care is taken to carry it out in detail. The capsule of the astragalo-scaphoid joint must be completely incised in its superior, medial and inferior aspects and all fibers of the calcaneo-scaphoid ligament sectioned before mobilization of the foot can be effected. The Tibialis anticus may rarely be found severely contracted and bowstrung across the ankle when the forefoot alignment is re-

stored. Transfer of the tendon to the dorsum of the foot in the cuneiform area is indicated. This is seldom required in the ordinary clubfoot, but has been found necessary and helpful in the equinovarus deformity associated with Arthrogryposis. The tendon is never transplanted to the lateral aspect of the foot.

Bone surgery is contraindicated before the age of 10 in girls and 11 in boys, if growth disturbances are to be avoided. This includes the procedure of decancellation also; preservation of the epiphysis of the bone is more important than preservation of the articular cartilage.

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INFANTILE CORTICAL HYPEROSTOSES*

A CASE REPORT

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A little over three years ago Caffey described a new syndrome, Infantile Cortical Hyperostoses.¹ His first report included four cases which were characterized by onset during the first three months of life, tender soft tissue swellings, fever, irritability, cortical thickening of various bones of the body, and a benign, self-limited course. A later communication indicated that this same process may affect children up to two and one-half years of age and may involve practically any bone of the body including the flat bones of the skull.² Smyth, Potter, and Silverman reported seven cases which undoubtedly represent the same syndrome.⁴ Extensive laboratory studies including biopsy examination of soft tissues and bones have shed no light on the condition as to etiology. Others reported isolated cases suggesting that these changes in soft tissues and skeleton may be due to some infectious process in some distant part of the body.^{5, 3}

The purpose of this paper is to report a case which fulfills the diagnostic criteria of this syndrome.

Case Report: Number 145-308, C. A., a colored female baby, was seen at Crippled Children's Hospital on March 23, 1948, because of swelling around both eyes and jaw, fever, irritability, and failure to gain weight. She had been born in this hospital in November, 1947 at 36 weeks gestation following premature separation of the placenta. Birth weight was approximately four pounds, eight ounces. During her eight week stay in the hospital nursery she had three episodes of rather severe diarrhea.

Eight weeks prior to this present illness a small hemangioma of the skin of the middle toe of the right foot became ulcerated and later infected. A few days later the child became feverish, increasingly irritable which was followed by this soft tissue swelling about the eyes and jaw.

The child had been fed on evaporated milk

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Fig. 1. Note the marked thickening of the mandible on May 13, 1948 with overlying soft tissue swelling which was regressed to normal by February 18, 1949.

with an adequate amount of cod liver oil and 50 mgm. of ascorbic acid three times a day.

Physical examination revealed a four month old colored female 22 inches in length weighing nine pounds three ounces. The rectal temperature was 99.2°. The child was obviously underdeveloped and under nourished and was hyperirritable. There was a moderate amount of periorbital swelling and some swelling over the mandible which was tender. The skin over these areas was smooth and shiny. No superficial adenopathy was noted. In addition the child had an umbilical hernia and a red, swollen, ulcerated lesion of the middle toe on the right foot.

Laboratory examination revealed a negative serology, normal urine studies, Hb. 9 grams, R. B. C. of 4,100,000 and W. B. C. of 11,750 with 69 per cent neutrophils, 2 per cent stabs, 1 per cent eosinophils, and 30 per cent lymphocytes.

Radiographic examination revealed the heart and lung fields to be normal. Subperiosteal bone formation was noted along the shafts of both humeri. The mandible showed soft tissue swelling and cortical

thickening. The right foot showed a soft tissue swelling of the middle toe with no evidence of bone reaction. Fig. I and II.

Impression: Infantile cortical hyperostoses and ulcerated, infected hemangioma of toe.

The lesion on the toe was treated with warm soaks and later with small doses of x-ray therapy and regressed quite satisfactorily.

Follow-up studies disclosed that on April 16, 1948, the patient was still quite irritable and the soft tissue swelling of the mandible persisted. Radiographic examination showed considerable thickening of the mandible, right, clavicle, both radii, with a minimal amount of periostitis of the remaining long bones. By May 13, 1948 the swelling about the jaw had subsided and this region was no longer tender. Neither was it tender over the right clavicle. Films showed some regression of the previously described cortical thickening. X-rays on June 11, 1948 showed that some periosteal thickening of the mandible and right clavicle still persisted. On her last examination in February 18, 1949 there were no constitutional symptoms and only a very minimal amount of resid-



Fig. 2. There is moderate periosteal thickening of the right clavicle on May 13, 1948 which has disappeared on February 18, 1949.

ual thickening of the mandible with the remainder of the bones appearing normal.

COMMENT

As in other reports the outstanding features of this case included soft tissue swellings — in this instance, overlying the mandible and right clavicle, subperiosteal bone formation of various bones, the occurrence in a young infant, and a benign self-limited course. The diagnosis here offered little difficulty inasmuch as we had access to the exhaustive and comprehensive studies of Caffey and Smyth. However, as Smyth pointed out, cases which would seem to fit into this syndrome have been reported in the past as “atypical scurvy”, “traumatic ossifying periostitis of the new born”, “hyperplastic periostitis” etc.

In the differential diagnosis one would have to include syphilis which should be ruled out by serologic methods. Acute osteomyelitis might pose a problem due to the soft tissue swelling, fever, and periostitis but serial radiographs will exclude this diagnosis. Scurvy might be thought of but would surely be rare under six months — the age when most of these cases occur. Also, the long bones are not decalcified and do not show the characteristic metaphyseal changes. In addition, one could make a vitamin C level determination. Pulmonary osteoarthropathy might conceivably be represented but with no evidence of chest pathology and the absence of clubbing of the fingers, this diagnosis would be untenable. Neoplastic disease might be thought of but the multiplicity of involvement and benign course as followed radiographically and clinically would rule out this possibility.

The radiographic findings may show an overlying soft tissue shadow with a laminated periosteal reaction which may be so marked as to double the diameter of the bone. The cortex may be quite irregular. The mandible, clavicles, femora, and radii are involved the most frequently but apparently almost any bone in the body including the flat bones may be involved. In Caffey's first description three of the four cases developed a pleural effusion, but this was coexistent with rather marked involvement of the ribs on the same side. In the case of the long bones, the middle three-fourths of the shaft

seem to be involved more extensively with little or no involvement of the metaphyses or epiphyses.

There apparently are no specific laboratory findings. Biopsy of several of these cases report periosteal new bone formation, fibrous tissue replacement of marrow with no evidence of any old or recent hemorrhage. Also irregular clumps of proliferating cartilaginous cells instead of the regular cell column. Surrounding muscle tissue appeared degenerated with fatty and fibrous replacement.⁴

We have nothing to contribute to the etiology. Upper respiratory infections have been indicated but no correlation between these lesions and such infections has been worked out. Viral infections or an allergic response have been postulated but lack substantiating evidence. In this case the three bouts of diarrhea during early infancy and later the infection of the ulcerated hemangioma of the toe really offer no satisfactory explanation for the latter disease.

No specific therapy was employed in this case. Radiographs of the skeleton taken 11 months after the onset of the disease show only a minimal amount of cortical thickening of the mandible and the child is apparently making a complete return to normal. This would be in complete accord with other observers.

CONCLUSION

A case history is presented which we believe fits the recently described syndrome, Infantile Cortical Hyperostoses. This is apparently the first case to be described in a Negro.

Note: This patient was recently seen by us and the patient has developed normally.

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THERAPEUTIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pharmacology, Medicine,
and Otorhinolaryngology.*

VASOMOTOR RHINITIS

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RAY M. BALLYEAT, M.D., LEE K. EMENHISER, M.D., AND
HARRY A. FORD, M.D.

DOCTOR HELLBAUM: This conference concerns seasonal and perennial rhinitis, a disease of the nose and paranasal sinuses, which results from an allergic reaction. We shall assume that the patient does have rhinitis, that the diagnosis has been made, and we will limit our discussion to the therapeutic aspects of the subject. The gross pathologic changes of vasomotor rhinitis are those of an acute inflammation of the mucosa. The mucous membrane is edematous and hyperemic. There is a diffuse, thin mucous secretion which has a few epithelial cells and eosinophils. The mucosa of the paranasal sinuses behaves in essentially a similar manner to that of the nasal passages. The most frequent causative agent for this disease is pollen, although there are other conditions such as atrophic rhinitis, in which no sensitivity to pollen is demonstrable, but most of these cases do show a sensitivity to dust, feathers or other allergies.

Our first discussant will be Doctor Ballyeat, who is widely known for his success in treating this disease. His topic is the therapy of vasomotor rhinitis by desensitization.

DOCTOR BALLYEAT: As Dr. Hellbaum stated, approximately 98 per cent of these patients with seasonal hay fever have various pollens as a causative agent. Seasonal hay fever can of course be produced by something besides pollen, such as cottonseed, or some other substance to which people are exposed during certain seasons. Perennial hay fever is usually the result of causes other than pollen. This group of allergens includes animal danders, foods, molds, and a large number of other substances.

We must consider two things in the therapy of these patients. First, eliminative measures, and second, desensitizing measures. There are a number of means of producing desensitization to pollens. Pollen may be given orally as a desensitizing measure, but this practice has almost been discontinued in this country, since the amount of pollen which is absorbed cannot be regulated. Probably the most successful means of administration is by subcutaneous or intradermal injection. One plan of attack is to begin desensitization two to five months before the season begins, giving injections every three or four days, and thus reaching a maximum dose before the season starts. Another plan is to continue injections throughout the year, keeping a high antibody titer at all times, and by this means extend the intervals between the injections to 14 or 21 days, depending upon the patient.

Patients vary greatly in their ability to become desensitized and in their ability to develop antibodies. They also vary in their ability to handle the extracts. Sometimes it is necessary to begin with dilutions of 1 to 100,000 more or less, and sometimes dilutions may be begun with concentrations as high as one in 10 or one in six. With the later dilutions desensitization can be carried out very rapidly. It is of interest to note that children usually handle almost as large a dose as an adult. During the hay fever season intradermal rather than subcutaneous injections have been found most useful, since antibodies seem to develop more rapidly following intradermal injections.

Desensitization is of course one of the most satisfactory procedures; however, in treating the perennial types of hay fever it is also necessary to determine the substances to which the patient is sensitive and eliminate them from the diet or from the sur-

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

roundings of the patient. Some patients are sensitive to a number of things. A patient may have both seasonal and perennial allergy. If the patient has first a perennial allergy upon which is superimposed an allergy to pollen, it may be extremely difficult to find the seasonal period during which this patient has his pollen allergy. If on the other hand, a patient becomes sensitive to pollen first and then picks up an allergy to, say the animal dander group, he will have definite seasonal incidents until he becomes a perennial hay fever patient. The treatment of either of these groups of patients, after both types of allergy are present, is to desensitize both with pollens and with the substance causing perennial hay fever, or to desensitize to certain substances and to remove the other allergens from his environment.

We feel that it is important to desensitize all hay fever patients, since approximately 35 to 60 per cent of people with seasonal hay fever and 50 to 75 per cent of the people with perennial hay fever will develop asthma. Patients will often have hay fever until they are 45 to 50 years of age; then after atrophy of their nasal mucosa the bronchial tree will become sensitized and these patients frequently develop asthma.

DOCTOR HELLBAUM: Dr. Balyeat, what is the status of the use of histamine in the treatment of allergic symptoms?

DOCTOR BALYEAT: Histamine has been used in urticarias of various types with considerable value. In many cases of hay fever, both seasonal and perennial, it is worth using as a palliative measure.

DOCTOR HELLBAUM: It is said that between three and four per cent of all individuals in this country suffer from hay fever. We also know that allergies are transmitted from one generation to the next and that there is indeed a tendency for inbreeding of this characteristic, since sufferers from allergy are quite often sympathetic toward each other. Associated with hay fever are of course the difficulties involving the sinuses. The paranasal sinuses may become secondarily infected and this disease may be extremely persistent and difficult to treat as a complication. We have asked Dr. Ford to discuss the problem of vasomotor rhinitis and its complications from the standpoint of the otorhinolaryngologist.

DOCTOR FORD: Persons suffering from vasomotor rhinitis are quite susceptible to sinus infections because of interference with the airway in the nose. The first principle of

treatment in this condition is to establish an airway. This may be accomplished in a number of ways. Doctor Balyeat has discussed the application of desensitization in this process. It may also be done by surgery. Among those conditions which must be considered in this disease are bony anomalies such as deviated septum, certain conditions involving nasal polypi, which must be removed in order to clear the airway. Once an airway has been established the remainder of the treatment is to stay out of the nose.

This brings us to a discussion of nose drops, which are in general contraindicated. When nose drops are used there is an initial vasoconstriction and a secondary vasodilation. The secondary vasodilation produces a boggy mucous membrane which does not allow free passage of air. The situation after the secondary vasodilation is then as bad, if not worse, than it was prior to the instillation of drops. If a patient has been using nose drops for a long period of time, it may be extremely difficult to get his nose open. In these patients it is often necessary to stop the use of nose drops entirely, and, while they will be miserable for a period of several weeks, they may eventually improve sufficiently to get along. On the other hand, many of these patients will require turbinate cautery or even turbinate removal if other means such as desensitization fail.

The exception to the general rule against nose drops is the patient who develops a secondary sinus infection and in whom we need to establish drainage. If sufficient drainage cannot be established by means of the vasoconstrictors about the orifices of the sinuses, it may not be possible to avoid surgery. Every effort should be made to treat simple vasomotor rhinitis by medical means. If these attempts fail, then a surgical procedure may be contemplated. The treatment of a secondarily infected sinus however is almost always surgical. Adequate drainage in this disease must be established. In addition to the surgery, the allergy must also be controlled or the results of surgery will be very disappointing.

DOCTOR HELLBAUM: Thank you, Doctor Ford. Now we will ask Doctor Emehiser to discuss cautery and the topical application of drugs in the treatment of vasomotor or allergic rhinitis.

DOCTOR EMENHISER: When a patient walks into my office he has already been using every kind of nose drop the drug stores sell and he generally has had his nose cau-

terized, because they go from one doctor to another. When they get to my office I recommend stopping the use of nose drops and tell them to give the nose at least one or two month's rest without any kind of local medication. I think there are many people walking around with stopped-up noses that they have given to themselves by using the vasoconstrictors.

DOCTOR HELLBAUM: When do you use nose drops? And if you use nose drops do you use the aqueous or oily solutions?

DOCTOR EMENHISER: I only use nose drops for the acute cold due to infection to shrink the mucous membrane of the nose. There has never been a nose drop made that has cured a case of allergic rhinitis. I don't want my patients to use them even temporarily. They will get to liking them and use them more and more, until they get a vasomotor paralysis, which is worse than the allergy. So I don't think nose drops have a place in treating anyone's allergic nose. Any time you use nose drops, put it in an aqueous solution and never in oil. There might be an exception to the rule occasionally, but as a rule, always use aqueous nose drops.

DOCTOR HELLBAUM: What about the use of chemical cautery? Does it do anything but give temporary relief?

DOCTOR EMENHISER: Chemical cautery used to be used a lot. The idea is that by streaking a red-hot wire or a chemical across an area, a portion of the mucous membrane is destroyed. This procedure has little place in the treatment of the nose. Cauterizing the turbinate will not cure anything either. It is only a temporary measure.

DOCTOR HELLBAUM: Thank you, Doctor Emenhiser. Now we will ask Doctor Shoemaker of the Department of Pharmacology to discuss some of the antihistaminic drugs with perhaps some mention of the sympathomimetic drugs, which Doctor Ford and Doctor Emenhiser have mentioned.

DOCTOR SHOEMAKER: There is no drug which will cure vasomotor rhinitis. Perhaps the closest approach to a cure is the use of a specific antigen causing the disease in a particular patient. All other measures which are available therapeutically afford symptomatic relief. Many of these drugs are strictly temporary measures. This is especially true of such drugs as epinephrine. Theoretically drugs may relieve the symptoms of vasomotor rhinitis in four ways. First, by the use of the autonomic drugs having a vasoconstrictive action; second, by the destruction of histamine, assuming that the

histamine theory is correct; three, by decreasing the susceptibility of the shock tissue to histamine or the H substance; and four, by in some way preventing the union of antigen and antibody so that histamine will not be liberated. The autonomic drugs most commonly used are the sympathomimetic drugs. These drugs simulate the action of the sympathetic nervous system. Some are administered by inhalation, some by local application in the form of solution, either in oil or in water, although the aqueous solutions are preferred.

A second means of treating this condition is by the destruction of histamine in the tissues. Histaminase was used for this purpose under the name of Torantil, but it has not proved successful. The third method is by decreasing the susceptibility of the shock tissues, and is the theory upon which desensitization is founded. Efforts have also been made to administer histamine orally, subcutaneously, and intravenously, and thus accomplish this end.

Recently the anti-histaminics have been introduced into medicine. Many of these drugs are now available. No doubt as the months go by the list of available preparations will continue to grow. Loew describes the anti-histaminics as those drugs which are capable of diminishing or preventing some of the pharmacological effects of histamine and which do so by a mechanism other than the production of pharmacological responses diametrically opposed to those of histamine. This definition precludes the use in this group of the sympathomimetic drugs. Anti-histaminic drugs are rather peculiar in their action. Some of them have a quinidine-like effect. Others have a sympathetic stimulant effect and others an atropine-like effect. There is no evidence that the anti-histaminics act by destroying histamine. They seem rather to prevent the access of histamine to the effector substance in the cell, which results in the clinical picture which we see in allergy. This so-called blocking effect is demonstrable in isolated tissues and organs. There is no evidence at present that these drugs in any way affect the antigen-antibody reaction. Some workers feel that the activity of the anti-histaminic drugs is due to their local anesthetic effects. Some of these drugs have local anesthetic potency several times that of procaine, and procaine itself has been used in treating certain allergic manifestations.

DOCTOR HELLBAUM: Doctor Ford and Doc-

tor Emenhiser have mentioned the use of nose drops in these conditions. I would like to know Doctor Balyeat's concepts as to their use in nasal allergy.

DOCTOR BALYEAT: It is true that if people begin to use nose drops and continue to use them indefinitely, the mucous membrane will become more and more boggy and eventually they will be worse off than before. However, I believe there is a place for nose drops. Seasonal hay fever patients who have their difficulty for only a short time may use nose drops at the time of their greatest difficulty and no particular harm is done. This is especially true in allowing them to get a good night's sleep. On the other hand, the perennial hay fever patient often uses nose drops much to his detriment. I should like to say a few words about the anti-histaminic drugs which have a very unusual action. There is a great variation in their action. Quite often with children we see one patient who can take very small doses of ephedrine, for example, and be quite stimulated by it; while on the other hand, another child will take approximately the same amount of ephedrine and become very drowsy. This is also true in adults as much as it is in children. The anti-histaminic drugs also show very wide variation. One patient will be able to take Benadryl in the usual therapeutic amount with no untoward effect, while another may not be able to take it at all because he becomes so groggy. We have reached the point where we do not advise people who drive cars to use Benadryl or other anti-histaminics during the day. We feel that they may use this drug in order to get a good night's sleep, if they take it at bedtime. Many times, if a child takes one of these anti-histaminic drugs at night he will do very poorly in school the next day. It seems to interfere with his thinking and other activities. We feel then that these drugs should be used carefully only in the evening and then only if the mother finds that the child is wide awake the next morning. In our own experience we have found that Benadryl is often more effective than Pyribenzamine; however many patients have a better effect from Pyribenzamine than from Benadryl. One thing I wish to mention at this time is something I want Doctor Emenhiser to discuss. He mentioned the turbinates a moment ago. Thirty years ago the nose and throat men took out turbinates right and left, and of course to me it was so illogical because the turbinate is the strainer, the humidifier and

the radiator. If we are going to take the turbinate out and let those things to which the individual is sensitive be taken down into the bronchial tree, then asthma will be encountered. At the present time not many are removing turbinates, but then the best ear, nose and throat men in this city and other cities were taking out lots of turbinates. The thing that happens to the individual who has perennial hay fever differing from the individual who has seasonal hay fever very promptly develops a chronic infection of the paranasal sinuses. Seasonal hay fever doesn't develop paranasal sinuses infection very often. The perennial hay fever almost invariably in due course of time will develop into a paranasal sinusitis. I think it is due to the fact that the individual who has seasonal hay fever will have his seasonal bout, and then be perfectly well. The nasal mucosa is normal and it gives the sinuses a chance to drain. The perennial hay fever patient has this chronic congestion the year round, has a chronic congestion during the period in which we have our acute respiratory infection; consequently they develop the superimposed infection. It makes it a very trying, complicated picture of a vasomotor rhinitis associated with a chronic generalized, so to speak, sinusitis of the frontal sinuses, etc. That brings up therefore a question of treatment.

DOCTOR EMENHISER: In treating secondary infection from chronic vasomotor rhinitis treat it just the same as if they didn't have the allergy which caused the original trouble. In other words, if they have a maxillary sinus full of pus, wash the sinus out, doing it several times if necessary, and treat it the same as if they didn't have allergy. However you had better inquire in their history about sensitivity to certain drugs. If you fill the sinus with penicillin and the patient has shown a previous reaction, you encounter a great deal of trouble. Any time you put a drug inside a sinus, be sure you ask about sensitivity to drugs. I use 5 or 10 cc. of whatever antibiotic I am going to use after I finish washing out the sinus. If he is very allergic, just use salt water and nothing else. Never put a drug in the maxillary sinus.

Patients will come in with the nose full of polyps and pus coming out of their nose because the polyps have the natural opening stopped up, which results in a regular cesspool, so take the polyps out in order to give him better ventilation, but don't tell

him that you are going to cure any allergy by taking the polyps out. Give him some relief and impress on him that you are only removing some obstruction that is due to the allergy — not tumors or cancers or anything which will alarm him. Take the polyps out and that will help temporarily, but be sure you keep on with the allergic treatment. They might grow back, thus explain this to the patient so that he isn't surprised a couple of years later if they do grow back. In addition, we use antibiotics systemically. They are much more efficacious when administered in this manner than when placed directly in the sinus. The dosage in sinus disease is the same as it is for an acute infection. We give 50,000 units intramuscularly every three hours day and night. Another method is to administer penicillin in amounts of 300,000 or 400,000 units once or twice a day in some preparation which delays its absorption.

DOCTOR SHOEMAKER: I would like to add something further in regard to the care necessary in the use of the anti-histaminic drugs. Doctor Balyeat mentioned the fact that they produce drowsiness and are probably a causative factor in many of the accidents on the highways. Recently one of the airplane companies has issued very definite instructions to their pilots not to attempt to fly a plane if they have been taking any of the anti-histaminic drugs within a 24-hour period. However I feel that we should go a little bit farther in stressing the care necessary in the use of the anti-histaminic drugs.

A question has been asked as to whether or not there are any known cases of

agranulocytosis due to the use of the anti-histaminics. I don't believe that any of the anti-histaminic drugs should be used over a long period of time in the larger doses unless frequent checks are made of the blood picture. Cases of agranulocytosis have been reported. There are not many cases, but they do crop up. Then there are other detrimental effects which are possible but of which there are no definite reports. There are many other factors that might be considered as far as the anti-histaminics are concerned, but I am thoroughly convinced that they should not be administered except under the careful supervision of a physician. If they are to be administered over a long period of time, check the blood to see that there is no change in the white cell count. At least don't wait until definite symptoms have developed.

DOCTOR HELLRAUM: Doctor Balyeat, a statement has recently been made and we have a question here which has come from the audience asking if the anti-histaminics are more effective when combined with desensitization. What are your ideas on this subject?

DOCTOR BALYEAT: It is certainly true that in a mild case of hay fever the anti-histaminic drugs work very well, but in the severe case they often do not work as well. Whether or not there is any potentiation of effects using the two together, I am unprepared to say. However it certainly seems logical that if we are improving a patient with desensitization, the anti-histaminic drugs would work better under these circumstances.

NEW MEMBERS

The following became members of the Oklahoma State Medical Association in May, 1950:

J. W. Ambrister, M.D., Hobart (Kiowa-Washita Society)

Dean C. Walker, M.D., Tulsa (Tulsa County Society)

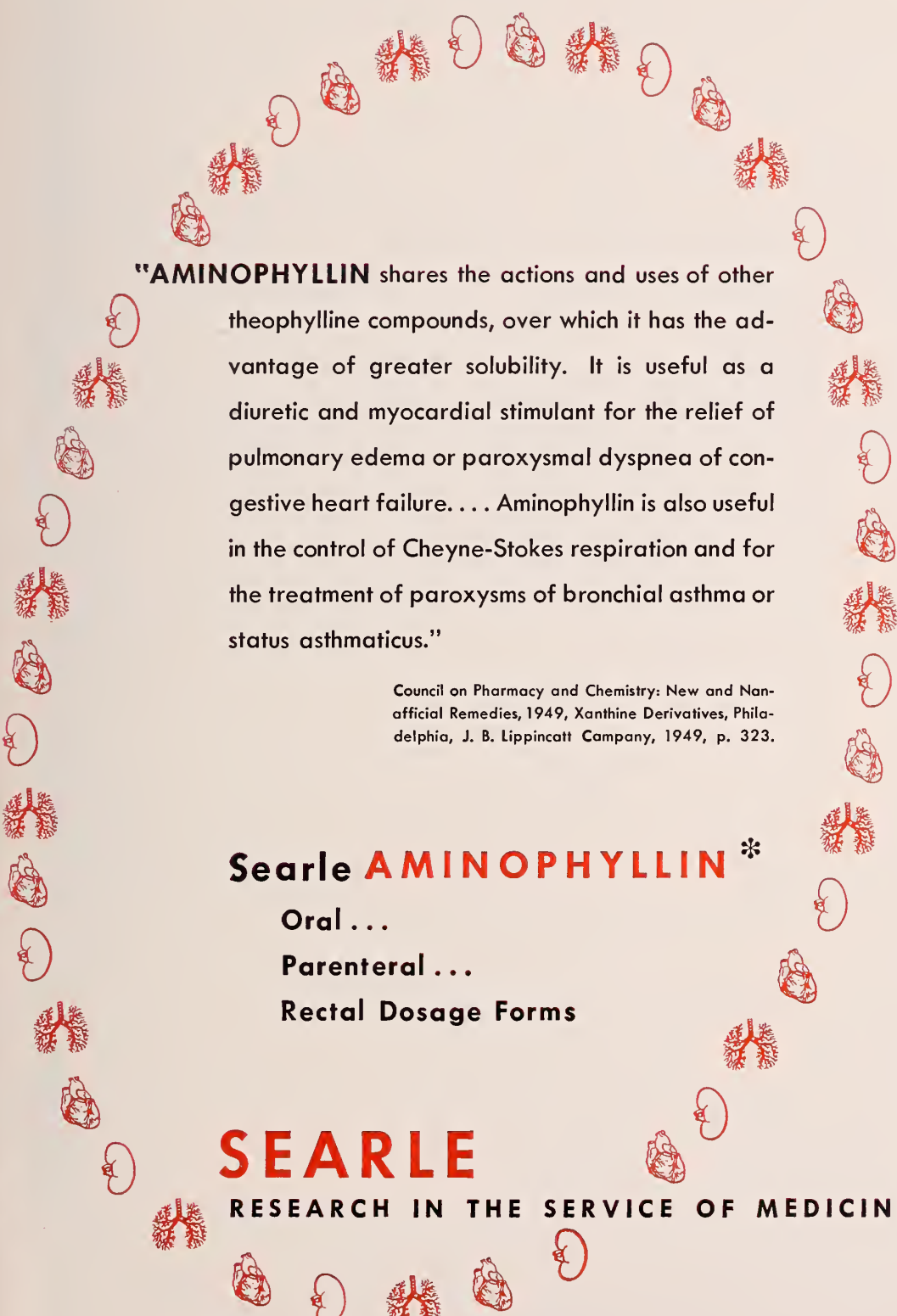
Loraine Schmidt, M.D., Stillwater (Payne-Pawnee Society)

J. Ronald Garst, M.D., Oklahoma City (Oklahoma County Society)

Fred W. Becker, M.D., Altus (Jackson County Society)

Malcolm Mollison, M.D., Altus (Jackson County Society)

Kenneth L. Peacher, M.D., Waynoka (Woods County Society)



"AMINOPHYLLIN shares the actions and uses of other theophylline compounds, over which it has the advantage of greater solubility. It is useful as a diuretic and myocardial stimulant for the relief of pulmonary edema or paroxysmal dyspnea of congestive heart failure. . . . Aminophyllin is also useful in the control of Cheyne-Stokes respiration and for the treatment of paroxysms of bronchial asthma or status asthmaticus."

Council on Pharmacy and Chemistry: New and Non-official Remedies, 1949, Xanthine Derivatives, Philadelphia, J. B. Lippincott Company, 1949, p. 323.

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President's Page

It is a distinct honor to be selected President of the Oklahoma State Medical Association. It is also a privilege and an honor to succeed Dr. George H. Garrison who has been so untiring and conscientious in his work. Under his leadership, organized medicine has not only progressed in Oklahoma but has gained recognition and attention among the national organizations. This past year will no doubt be long remembered as a year of outstanding achievement. The members of the Association should congratulate themselves on having had such an outstanding leader, and because of the many sacrifices and efforts on our behalf, we feel that we owe him a real debt of gratitude.

There are always disadvantages in following an administration with such a successful record. This plus the thought of the responsibilities and tremendous amount of work that remains to be done, is it no wonder that your new President shakes in his boots.

This is a year of many problems; the foremost being that of election year. In every human undertaking there comes a time for decision and action. This year is a time of decision that requires positive action on the part of the medical profession. Doctors are confronted with an undeniable paradox. Either they enter into the political arena or see politics enter medicine. The question of compulsory versus voluntary health insurance will be a big political issue in the coming elections.

The recent election in Florida demonstrates what the doctors and their friends can accomplish when frightened into action. An editorial in one of the leading southern newspapers stated: "The removal of Senator Pepper from the United States Senate is the greatest public improvement since the invention of modern plumbing". Yet, the proponents of socialized medicine are not easily discouraged; in fact, they seem to be stimulated to renewed action.

So, in borrowing Doctor Garrison's phrase, now is the time for all doctors, their families, their friends, and all they can influence to register. Acquaint yourselves with those seeking political office and their platforms and on election day go to the polls and exercise that franchise which gives you a right to vote. This is the democratic way to preserve American freedom . . . Medical freedom. This way is the voting way but it is the best way ever devised although it poses grave responsibilities which no doctor can afford to ignore.



President.

*Announcing
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STATES ASKED TO SET UP EMERGENCY CATASTROPHE PLAN

Emphasizing the necessary planning that should be immediately undertaken on the state-county city level to protect this country in case of a catastrophe, invasion or internal disaster, the sixth semi-annual meeting of the Council on National Emergency Medical Service of the A.M.A. was held May 6 in Chicago. Attending from the Oklahoma State Medical Association was Ralph McGill, M.D., Tulsa, at that time President-Elect and now Association President.

State Medical Associations, allied professional organizations, government agencies, and military forces were represented at the meeting. Stressing the importance of setting up the necessary facilities and personnel, the Council was urged to instigate a program of postgraduate training of the medical and allied professions caring for casualties with the medical profession acting as the teaching group. The proposed program will be activated by the Oklahoma State Medical Association as soon as possible.

The Central Maine General Hospital Catastrophe Plan (Lewiston, Maine) was presented to the group as a tentative plan for other states to follow.

VOLUNTARY HEALTH INSURANCE CONFERENCE DRAWS OKLAHOMANS

Designed to bring into contact all agencies offering voluntary health insurance to the public, a conference was held in Fort Worth May 6, 1950, sponsored by the Council on Medical Service of the American Medical Association.

Representatives from Oklahoma attending this Southern Regional Conference on Voluntary Health Insurance were George H. Garrison, O.S.M.A. 1949-50 President; Mr. N. D. Helland, representing Blue Cross and Blue Shield; Mr. Dick Virtue and Mr. Lewis Sale, Oklahoma Accident and Health Underwriters Association; and Dick Graham, O.S.M.A. Executive Secretary.

States invited to participate were Arkansas, Kansas, Louisiana, Mississippi, Texas and Oklahoma. All states invited were represented.

Similar meetings are scheduled for South Carolina, North Dakota and Utah. The meetings are planned to cover areas within the majority of the states having less percentage of people covered in voluntary health plans than the national average. The conferences bring together agencies both non profit and commercial. National average for non profit plans for hospitalization coverage is 22.17 per cent. Oklahoma's coverage in hospitalization is 15 per cent; and medical and surgical, eight per cent. The meeting brought about the discussion of the problems of contracts, availability to the public of voluntary health insurance, and the necessity for like meetings to be held at the state level between representatives of the hospitals, medical profession and the voluntary health plans offering health and medical care to the public. It is contemplated that such a meeting will be held in Oklahoma in the near future.

PHYSICIANS BUSY BUILDING, REMODELING, ENLARGING

Throughout the state physicians are building new clinics, moving to remodeled offices or enlarging their present office space. According to information received through the clipping service at least one dozen doctors are practicing in new or remodeled offices.

In Bartlesville five physicians have banded together to give Bartlesville one of its finest pieces of modern architecture in a building named the "Medical Center". Physicians who have moved into this building are H. C. Weber, M.D., George M. Tulloch, M.D., Forrest C. Lawrence, M.D., C. L. Johnson, M.D., and E. E. Beechwood, M.D. The physicians are operating as family practitioners and not as a clinic.

The Bartlesville Medical Center has 7200 feet of floor space. It is being finished in a pastel shade of blue. Each office has an individual waiting room and two treatment rooms. There is a central lobby at the front entrance. A modern pharmacy is available in the building plus a complete laboratory. An emergency room for minor surgery is also available.

Ned Burleson, M.D., Prague, has constructed the Prague Clinic, bringing the most modern clinic facilities to Lincoln County. An L shaped building, of white asbestos shingles, it has a semi-flat roof of white chipped marble. The ceilings are soundproof and aluminum windows are used exclusively. The floors are covered with plastic and rubber tile. A large reception room leads to offices for the doctors and three examining rooms. At the left of the reception room is a library which is joined to the reception room by folding doors. When these are thrown back, one large room can be formed for meetings. Four rooms designed for two patients each, and one room for three patients — will house a total of eight in the clinic. In addition, there will be a nursery to care for new babies. A drug room, x-ray room and laboratory are located toward the front of the building behind the business office. The operating room, scrub room, sterilizing room and delivery room have pale green walls, a new trend in hospital design. In addition to Doctor Burleson the clinic has a staff of approximately eight people including four nurses, a laboratory technician, receptionist, cook and janitor.

The Cowart-Bowie Clinic in Bristow is in the process of doubling its size through enlargement of the reception rooms, adding four small offices and laboratory rooms and remodeling and redecorating the entire building. Physicians associated in the clinic are O. H. Cowart, M.D., and Carl Bowie, M.D.

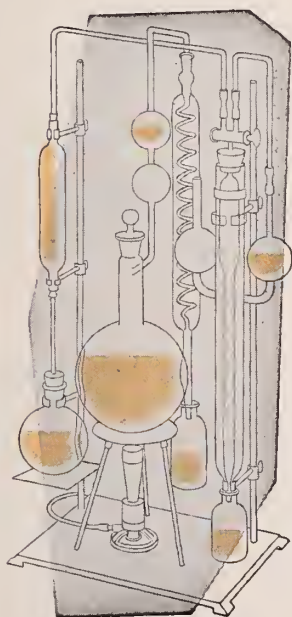
Paul T. Powell, M.D., Ponca City, is now occupying newly decorated offices in the Community building in Ponca City. He previously had his offices in the Royalty building.

Three Hobart physicians, J. P. Braun, M.D., J. William Finch, M.D., and J. W. Ambrister, M.D., have moved into a new medical clinic at the corner of Broadway and First Streets in that city. Personnel will include a bookkeeper, laboratory technician and three medical assistants.

AUREO- MYCIN

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AUREOMYCIN



Surgeons are now generally coming to the conclusion that the use of aureomycin preoperatively and post-operatively in all cases is worthwhile insurance against infection. This is particularly true in infections involving the peritoneum.

Aureomycin has also been found effective for the control of the following infections: African tick-bite fever, acute amebiasis, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, acute brucellosis, Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), Gram-negative infections (including those caused by the coli-aerogenes group), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, tularemia and typhus.

Capsules: Bottles of 25, 50 mg. each capsule.
Bottles of 16, 250 mg. each capsule.

Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

FIVE PIONEER DOCTORS RECEIVE 50 YEAR AWARD

Five more physicians who turned to medicine before the turn of the century have been presented 50 Year Pins by the Oklahoma State Medical Association. New wearers of the gold lapel pin are F. L. Wormington, M.D., Miami; W. M. Gallaher, M.D., and J. M. Byrum, M.D., Shawnee; H. Lee Farris, M.D., Tulsa; and John R. Callaway, M.D., Pauls Valley.

Presented by President Elect Ralph A. McGill, M.D., Tulsa, Doctor Wormington received his pin May 17 at a Rotary Club luncheon in Miami. Doctor Wormington was born in Ritchey, Mo., and attended school in Neosho and studied at the Baptist college in Pierce City before entering the University of Arkansas. He was graduated from the University Medical School in Kansas City, Missouri in March, 1900. He moved to Miami April 18 of that year and has practiced there since that time.

Doctor Wormington is a member of the Masonic lodge; in 1909 he was initiated into the Scottish Rite and he joined the Ancient Order of the Mystic Shrine in 1910. He received the 33rd Masonic degree in 1924. He is also a member of the York Rite bodies and was made a member of the Red Cross of Constantine in McAlester in 1925. He is a life member of the Royal Order of Jesters. Doctor Wormington is also a member of the Chamber of Commerce, the Miami Knife and Fork Club, Akini Shrine Club, and Miami Rotary Club. He is a member of the Ottawa County Medical Society, Oklahoma State Medical Association, Southern and American Medical Associations.

Doctors Gallaher and Byrum were presented their 50 Year Pins at a meeting of the Pottawatomie County Medical Society. George H. Garrison, M.D., O.S.M.A. President, awarded the pins.

Doctor Byrum was born July 9, 1817 in Monroe County, east Tennessee. He was graduated from the Medical University of Tennessee in 1900. Later that year he began the practice of medicine in Sulphur Rock, Arkansas. In 1903 Doctor Byrum moved to Asher and in 1908 he moved to Shawnee.

Doctor Byrum is a member of the Lions Club, Knife and Fork Club, Masonic Lodge, Consistory of McAlester, Central Presbyterian Church. For several years he was Secretary of the Oklahoma State Board of Medical Examiners.

Another Pottawatomie county doctor, William Marshall Gallaher, M.D., was born March 1, 1877 at Wheat, Roane County, Tennessee (now known as Oak Ridge). He attended the U. S. Grant University at Chattanooga from which he graduated in 1900. Later that year he

started the practice of general medicine in southwest Arkansas, Little River County. Doctor Gallaher came to Shawnee March 17, 1908. Doctor Gallaher is a member of the Rotary Club, Masonic Lodge, Elks Lodge and First Presbyterian Church. For several years he was a member of the Council of the Oklahoma State Medical Association from the Seventh District.

At the May 22 meeting of the Tulsa County Medical Society, H. Lee Farris, M.D., was presented a 50 Year Pin. The presentation was made by Ralph A. McGill, M.D., President-Elect of the Oklahoma State Medical Association.

Doctor Farris was born in Kentucky and attended Transylvania College of Lexington, Kentucky. In 1896 he enrolled in the Medical Department of the University of Louisville, later transferring to the Medico-Chirurgical College of Philadelphia, Pennsylvania (later assimilated into the Graduate Department of the University of Pennsylvania). He was graduated May 19, 1900, a member of the first four-year class in medicine to be graduated from any medical school in the United States.

He interned at Samaritan Hospital of Philadelphia and later served a residency at Medico-Chirurgical Hospital of Philadelphia. At the latter institution, he assisted Dr. William H. Rodman in the first major surgical operation ever performed under spinal anesthesia. Dr. Farris is also credited with devising the first machine-driven ambulance seen on the streets of Philadelphia.

Subsequently practicing eight years at Memphis, Tennessee, Doctor Farris served as Associate Professor of Gynecology at the old College of Physicians and Surgeons of Tennessee, later the Medical Department of the University of Tennessee. He practiced later at Paris, Texas, moving to Oklahoma in 1922 as chief surgeon for the old Oklahoma Hospital of Tulsa. Since 1928 he has been in private practice with offices in the Medical Arts Building of Tulsa. In 1942 Doctor Farris was appointed Medical Director of Douglas Aircraft Corporation, supervising four physicians and 40 nurses in the care of 25,000 plant employees.

A specialist in Surgery, Doctor Farris is a member of the American Medical Association, the Oklahoma State Medical Association, the Tulsa County Medical Society, and a fellow of the American College of Surgeons. He is married and has one son, a professor of Greek at Loyola University.

John R. Callaway, M.D., received his 50 Year Pin from Lewis J. Moorman, M.D., secretary-treasurer of



Left to right—Violet Sturgeon, M.D., Hennessey, 1949-50 O.S.M.A. Vice-President, presents the Pottawatomie County Charter. J. M. Byrum, M.D., and W. M. Gallaher, M.D., both of Shawnee, receive 50 Year Pins from George H. Garrison, M.D., O.S.M.A. 1949-50 President of O.S.M.A.

the O.S.M.A. and editor of the Journal. Doctor Callaway began his service as an understudy to three pioneer Garvin county physicians in 1900. Six years later he was graduated from the College of Physicians and Surgeons at St. Louis and licensed to practice on his own. He received his pre-med training at the College of Idaho. Following his graduation, Doctor Callaway entered the government Indian service. When war came in 1917 Doctor Callaway was transferred to service with the army, being assigned to the Eighth Regimental Cavalry at Fort Bliss, El Paso, Texas. January 1, 1920 he returned to Pauls Valley to again join his father in the practice of medicine.



MEDICINE IN THE NEWS

Thomas C. Points, M.D.

"A State Cancer Clinic Could Save Your Life" — Clive Howard — *Woman's Home Companion*, June, 1950, page 40. Hear ye, hear ye, all ye that cast your eyes and read this article start raising a fuss and a stink for a State Cancer Clinic (and all other forms of government medicine) because it is the only way you will ever be saved from cancer. It does give credit to the local detection centers and in a rare case the family physician for making the diagnosis but nobody is competent to take over from there for treatment except State Clinic. This article describes the M. D. Anderson Cancer and Research Hospital at Houston, Texas. In the midst of this dissertation the statement is made that Europe and England are way ahead of us in establishing this form of treatment. Sure, go on and get socialized medicine and then what? It becomes more and more apparent to me, after these few months experience with this column, that the average physician doesn't realize the tremendous propaganda being put in these magazines for government medicine. Most of us don't take time to discuss these articles with patients and show what they are, instead we just keep on doing our good medicine apparently without concern as to what our patients think they are learning from the lay press.

"Why I Oppose Mercy Killings" — Benjamin F. Miller, M.D. — *Woman's Home Companion*, June, 1950, page 38. I wholeheartedly agree with this man's view on this controversial subject. He himself was once diagnosed as an incurable, and theoretically a case for Euthanasia. He was suffering from a condition wrongly diagnosed, apparently with some justification. Also he points out the fact that tomorrow a cure for that disease may be announced. Then the weight would be put on any board that might be set up to decide which cases would be suitable for Euthanasia. It is an excellent article for every doctor to read and think about.

"Birth" — Arthur Gordon — *Today's Woman*, June, 1950, page 43. This synopsis of the miracle that follows conception to post natal life is very well written not alone from all it means to the mother and her ordeal but from the baby's welfare. I especially liked the last two paragraphs in this article which are quoted below:

"Both man and woman have their share in this creation, woman's share being far more difficult and demanding and inspiring than man's. But humble people everywhere know that they have not created life, that they have only been used as a means of creating it; that they have been used by the great force that keeps life pulsing forward in the face of overwhelming odds. That force has many names. Scientists have called it the law of evolution. Philosophers have called it creative principle or the impulse of life.

"The humble people usually call it God."

"Dangers for Youngsters in Antihistamine" — Herman N. Bundensen — *Ladies Home Journal*, June, 1950, page 192. The director of Chicago Health Department who wrote this article did a very good job both for the physicians and the parents. The unjudicious uses of these drugs are thoroughly gone into and explained and the rules he gives are true of any drug for children (1) Don't give unless under a physician's direction and (2) Don't leave them where children can reach them to take on their own free will.

Left—Dr. McGill Presents 50 Year Pins to Drs. Wormington, Farris, Carlsson and Mitchner (top to bottom).

ROBERT M. BECKER, M.D.

THAT MORE MAY KNOW

That More May Live Longer



The movement to assure the operation of the Oklahoma Medical Research Foundation has received a tremendous impetus as the result of several outstanding gifts made recently.

Mr. J. G. Puterbaugh, McAlester, president of the Foundation led the way with a pledge of \$100,000, declaring that "Those of us who have been fortunate enough to accumulate some more than we and our families will need, owe a great debt to those painstaking scientists and technicians who, by dedicating their lives to research, have made it possible for all humanity to have better health and to live longer."

Dr. Coyne Campbell, Oklahoma City physician shall always be remembered as a staunch supporter of the Research Foundation for his unusual and tremendous gift of the Campbell Sanitarium. Doctor Campbell made an outright gift of the hospital to the Foundation and it has been operating as the "Research Foundation Sanatorium" since March 1.

Mr. Clarence Wright, president of the Sunray Oil Company was the third citizen of Oklahoma to make a large contribution to the Foundation. Taking the lead as Tulsa county chairman in the development fund campaign, Mr. Wright and Sunray company pledged \$60,000 to the Foundation.

With the stimulus of these large gifts, the campaign has resulted in new pledges totaling nearly one million dollars. The work of securing adequate financing to assure the operation of the Foundation will continue, according to Hugh Payne, until sufficient income is secured to provide independent financing, for five to 10 years.

SPEAKERS ACTIVE

Residents of several sections of Oklahoma have heard

the meaning of research explained as it pertains to the average citizen by Dr. Onis Hazel, Oklahoma City physician.

Working as a volunteer, Doctor Hazel has spoken to groups in Seminole, Cushing, Konawa, Ardmore, Stillwater and several other cities, where public campaigns are being held to gain support for the Foundation.

In this activity, Doctor Hazel has been one of a group who have made public appearances on behalf of the Foundation campaign including Mark R. Everett, dean of the O.U. School of Medicine, Dr. Vernon Cushing, W. D. Beard of Ponca City, Dr. W. F. Lewis, Lawton, "Chuck" O'Connon and Kenneth Wallace, Oklahoma City.

RESEARCH HOSPITAL PLANS

The time when construction on the Research Foundation Hospital will begin is drawing close, according to Hugh Payne, general manager of the Foundation.

The structure will extend north from the east end of the Foundation building. It will have 22 beds, and will be so constructed that additions may be made later if desired. Construction is expected to take about one year.

PLEDGE REPORT

The overall total of pledges to the Foundation is now well over the three million mark and work is continuing to reach the final objective of five million. Here are the latest figures.

GROUP	No.	GRAND TOTAL	
		Amount	Goal
Doctors of Medicine	679	\$21,050.00	525,000
Dentists	228	143,698.41	255,000
Pharmacists	508	133,570.00	300,000
Medical Service Society	1	5,000.00	
Nurses	1236	53,082.25	50,000
Technologists	59	5,555.43	
General	4504	1,749,049.39	1,870,000
	7215	\$2,911,005.48	\$3,000,000

*M.D.'s long range goal \$1,000,000.

ANNOUNCEMENTS

BASIC SCIENCE BOARD. Date for examinations to be given by the board has been set for September 15, 1950 at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma. Registration will begin at 7:30 a.m.; examinations will begin at 8:00 a.m.

NATIONAL GASTROENTEROLOGICAL ASSOCIATION. Postgraduate course in gastroenterology will be

given at the Hotel Statler, New York City, October 12, 13, 14, 1950. For further information and enrollment write the Association, Dept. GSJ, 1819 Broadway, New York 23, N. Y.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1-2. Oklahoma City.

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Oklahoma City

MEET OUR CONTRIBUTORS

Clair J. Cavanaugh, M.D., Topeka, Kansas, was co-author of "Infantile Cortical Hyperostoses" in this issue of the Journal. Doctor Cavanaugh was graduated from the University of Iowa in 1947 and took a residency in radiology.

P. E. Russo, M.D., A.B.R., Oklahoma City, is the joint author of "Infantile Cortical Hyperostoses" in the July Journal. Biographical sketch of Doctor Russo appears in the June issue.

Charles S. McCammon, M.D., Navajo Medical Center, Fort Defiance, Arizona, wrote "Dangerous Post-Partum Blood Loss" in this Journal. Doctor McCammon was graduated from Vanderbilt University School of Medicine in 1945 and limits his practice to his specialty, obstetrics. Before going to Fort Defiance, he was with the venereal disease division in Meridian and Greenwood, Miss. Dr. McCammon is a commissioned officer in the U.S.P.H.S. with the rank of surgeon (r) and is a member of the American Public Health Association.

Donald B. McMullen, D.Sc., has an article on "Parasitic Diseases and Problems in Diagnosis" in this Journal. Dr. McMullen was graduated from Johns Hopkins University in 1935 and does teaching and research in parasitology and tropical medicine. He is a member of the Society of Experimental Biology and Medicine; American Society of Tropical Medicine, American Society of Parasitology, American Public Health Association, American Microscopic Society, Oklahoma Academy of Science, and American Association for the Advancement of Science (fellow). Now associated with the University of Oklahoma School of Medicine he was previously consultant to the secretary of war, Army Epidemiological Board, Comm. on Schistosomiasis, 1945-46, Philippine Islands and Japan, senior parasitologist with armed forces in far east, 406th Med. Gen. Lab., Tokyo, Japan, 1947-49.

J. L. Richardson, M.D., Tulsa, a graduate of Columbia University in 1939, has a paper on "The Treatment of Clubfoot" in this issue. A specialist in orthopedic surgery, he is a member of the American Board of Orthopedic Surgery, Southwestern Surgical Congress, Southeastern Surgical Congress, and American Medical Association. He has been certified by the American Board of Orthopedic Surgery. Before coming to Tulsa, he practiced two years at Williamson, West Virginia.

J. DeWitt Fox, M.D., B.A., D.N.B., editor of Life and Health, Washington, D.C., has an article on "Selection of Blood Donors" in the July Journal. He was graduated from the College of Medical Evangelists in 1946 and is a member of the American Association for the Advancement of Science, American Public Health Association, American Social Hygiene Association, American Medical Writers Association, American Association of Physician Artists and the Electron Microscope Society of America. Dr. Fox interned at Henry Ford Hospital in Detroit and was stationed at San Antonio, Texas, and San Francisco, Calif. during army service. He also practiced in Los Angeles before coming to Washington.

HAVE YOU HEARD?

R. C. Meloy, M.D., Claremore, spoke to members of the Rotary Club of that city on duties and functions of the club service committee.

C. E. Williams, M.D., Woodward, was speaker at the Kiwanis Club luncheon there recently.

G. E. Haslam, M.D., Anadarko, discussed treatment of sinus and allergies at an Apache Rotary club meeting recently.

C. S. Stotts, M.D., Pawhuska, was principal speaker on "Health" at the Franklin PTA.

E. C. Mohler, M.D., Ponca City, has been appointed Kay county chairman in a campaign to raise funds for the Archibald Church library at the Northwestern University Medical School.

McLain Rogers, M.D., former longtime mayor of Clinton, addressed the Clinton Lions club on Clinton as he observed it in the past, as it looks to him now, and as he sees its future.

Rene G. Gerard, M.D., has moved from Atoka to Durant.

H. E. Denyer, M.D., Bartlesville, spoke on "Cancer in Women" at the Medical Assistants Society meeting of that area.

Harry E. Barnes, M.D., Oklahoma City, listed polio precautions when he spoke to the Noble County Council of Home Demonstration Clubs in Perry recently.

Grady Mathews, M.D., Oklahoma City, state commissioner of health, and *Charles R. Rountree, M.D.*, Oklahoma City, chairman of the Board of Health, attended the dedication of Wewoka's new health center.

J. Howard Baker, M.D., formerly of Eufaula, has moved to Quinton, Oklahoma.

M. L. Henry, M.D., and *Richard Harkins, M.D.*, both of McAlester, won first and second place prizes and two other trophies in motor boat races at the first annual Fort Worth Eagle Mountain Lake Marathon recently.

Paul Williamson, M.D., Pawhuska, spoke on "The Family as a Unit From the Doctor's Standpoint" at a recent Fellowship dinner at the First Christian Church there.

Carroll Pounders, M.D., was guest speaker at a Heronville PTA session in Capitol Hill, Oklahoma City.

John Gilbert, M.D., Ponca City, presented a paper on "Fibrocystic Diseases of the Pancreas" at a recent meeting of the Ponca City hospital.

Paul Gallaher, M.D., Shawnee, spoke on "Mental and Nervous Diseases" at the Pottawatomie County Nurses' Association.

C. Riley Strong, M.D., El Reno, announces the arrival of Stephen Robert Strong on April 18, 1950. Doctor and Mrs. Strong also have another son, Clinton Riley Strong, III.

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MEDICAL SOCIETIES AROUND THE STATE

Kay-Noble

John P. Wolff, M.D., Oklahoma City, was guest speaker at the May meeting of the Kay-Noble County Medical Society. Dr. Wolff spoke on "Vascular Disturbances of the Lower Extremities."

Garvin County

At a recent Garvin County Medical Society meeting a resolution was passed praising the work of the late Dr. R. M. Alexander of Paoli.

Choctaw-McCurtain-Pushmataha

F. P. Baker, Superintendent of the Eastern Oklahoma Tuberculosis Sanatorium spoke at the Choctaw-McCurtain-Pushmataha County Medical Society recently. He told the group that miracle drugs recently hailed as wonder cures have worked no miracles in TB Sanatoriums in Oklahoma.

Hughes-Seminole

Physicians from Hughes and Seminole Counties met in Wewoka for dinner and a technicolor film on cancer detection. Three Oklahoma City physicians, J. R. B. Branch, M.D., Peter Russo, M.D., and Everett Neff, M.D., furnished the program.

Pottawatomie County

Approximately 75 doctors and their wives from seven counties attended the annual spring clinical meeting of the Pottawatomie County Medical Society. After a medical conference for the physicians in the afternoon, a social hour and banquet was held at the Country Club. Speakers at the afternoon session were Paul Kernek, M.D., Holdenville; Julian Wood, M.D., Seminole; and Earl Muntz, M.D., Ada.

Stephens County

E. B. Thomasson, M.D., and A. J. Weedn, M.D., were hosts at the monthly dinner for the Stephens County Medical Society recently. Guest speaker was J. R. Regan, M.D., of Wichita Falls, Texas.

Greer County

H. H. Howard, M.D., Lawton, discussed the treatment of congestive heart disease at a meeting of the Greer County Medical Society held recently in Mangum.

Logan County

Members of the Logan County Medical Society are pledging their support and recommending that an iron lung be purchased for the Benedictine Heights Hospital polio ward. The fund drive is being sponsored on a voluntary contribution basis by county civic organizations.

Tulsa County

Robert L. Anderson, M.D., Tulsa, spoke on "Problems in the Field of Thoracic Surgery" at the Tulsa County Medical Society meeting May 22.

Tri-County

The public welfare program in Oklahoma and the medical examinations of welfare applicants were discussed at a meeting of the Tri-County Medical Society in Hugo May 9. Guests at the meeting were Virgil Stokes, state director of the Department of Public Welfare; Joe N. Hamilton, Director of the Crippled Children's Commission, Dick Graham, Executive Secretary of the O.S.M.A., and Joseph Kelso, M.D., of the medical advisory committee to the welfare department.

Muskogee-Sequoyah-Wagoner

Dr. Ernest Lachman, professor of Anatomy, University of Oklahoma School of Medicine, spoke on "Anatomical Pathways in the Spread of Cancer" at the meeting of the Muskogee-Sequoyah-Wagoner Medical Society and the medical staff of the Veterans Hospital.

Canadian County

The Canadian County Medical Society, in cooperation with the PTA is holding a health clinic for each school child with periodic examinations to be held throughout the summer. In turn, the PTA is donating \$600 to the Medical Society for the new hospital fund.

Pittsburg County

Members of the Pittsburg County Medical Society met in McAlester for the May meeting. Guest speaker was D. H. O'Donoghue, M.D., Oklahoma City.

Kiowa-Washita

Members of the Kiowa-Washita County Medical Society and Auxiliary had a joint dinner May 9 in Cordell. Following the dinner, the physicians held a scientific meeting and the Auxiliary had a separate business meeting.

OBITUARY

JOHN W. RILEY, M.D. 1878-1950

John W. Riley, M.D., Oklahoma City, a past president of the Oklahoma County and Oklahoma State Medical Association, died May 15 following an illness of six months.

Doctor Riley, who was born in Mexico, New York, was graduated from the College of Medicine in Buffalo, New York, in 1878. He practiced in Buffalo five

years before coming to Oklahoma City in 1906.

He was active in Catholic church circles and was made a Knight of St. Gregory by Pope Pius XI. He was also a Knight of Columbus.

Survivors include his widow of the home, one sister and one brother, Dr. James T. Riley of El Reno.

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BOOK REVIEWS

COMMUNICABLE DISEASE NURSING. Theresa L. Lynch. Second Edition. C. V. Mosby Company, 1949. Price \$4.75.

Recently a doctor said he had heard that, "All nurses would soon have to be Ph.D.'s." Be that as it may, the author of this book is a nurse who does have a Ph.D. degree. She is also well qualified in the field of communicable disease, having served for many years as Superintendent of Nurses and Director of Instruction at the Willard Parker Hospital, New York City, N. Y. She is now Dean of the School of Nursing, University of Pennsylvania.

In the preface of this second edition, the author states that the swift succession of events which have contributed to our knowledge of acute communicable diseases, within the past few years, has resulted in changed concepts of treatment, of methods of control, and nursing care. This has necessitated complete revision of all material, although the general outline of the book remains the same as in the first edition which was published in 1942. Previously used tables have been brought up to date, irrelevant illustrations have been omitted, nomenclature has been changed in accordance with most recent opinions, and new techniques have been incorporated. A noticeable example is the use of masks. The author has made good use of all research and studies done in this field in the past few years. New chapters added are: Sulfonamides and Antibiotics; Infectious Mononucleosis; Infectious Hepatitis; and Serum Hepatitis. The book is well illustrated showing points in nursing techniques as well as color plates of various communicable diseases. There are five appendices which are valuable aids. Appendix B is devoted to concise paragraph discussions of the less communicable diseases and has been enlarged to include such conditions as Haverhill Fever, Q Fever and Schistosomiasis.

In schools of nursing in Oklahoma, this book will be of greatest value when used as a reference. As we have no block of clinical experience in communicable disease nursing, it is too comprehensive for the few hours theoretical instruction given in the majority of our schools. However, it should be a valuable aid to the instructor.—(Mrs.) Juanita Granger Millsap, Clinical Instructor, Wesley School of Nursing.

UROLOGICAL SURGERY. Austin I. Dodson, M.D. C. V. Mosby Company, 1950.

This book, a second edition, makes a very definite approach to simple, brief, complete explanation of everyday surgical problems concerning the genito-urinary tract. With its 645 illustrations, most every commonly encountered surgical problem is considered and necessary illustrations are found.

While being a valuable reference to the urologist, it presents in simple, concise manner a clear picture of the surgical problems necessarily handled by the doctor doing general practice. For example: the opening chapter "Anatomy of the urography." Pre and post operative care, acid-base balance, transfusions and shock treatment are some examples of the common subjects covered briefly but adequately. Radiation therapy, ureterosigmoidal anastomoses, surgical approaches to the kidney, nephroptosis and its treatment, are some of the more complicated subjects dealt with in a manner which would give a lift to either the urologist or the general practitioner who might be

dealing with these rather highly specialized problems.

Some of the subject material is covered by contributors and the high quality work of these men make the already masterful structure of the book a more complete balanced unit. I mention a few specific chapters for illustration: particularly "Renal Tuberculosis", "Endocrinology of the Prostate", as examples of fine contributions to this treatise on surgical treatment of urological problems.

The book will furnish a quick reference to those already fairly well informed along urological subjects, but is probably a little too brief to be used as a text for beginners, such as medical students.

—Meredith M. Appleton, M.D.

PRIMER OF ALLERGY. Originally by Warren T. Vaughn, M.D., Third Edition, Revised by J. Harvey Black, M.D., Dallas, Texas, Cloth, St. Louis, The C. V. Mosby Company, 175 pages with 25 illustrations, 1950. Price \$3.50.

If satisfactory results are to be experienced in the management of allergic disease, the education of the patient assumes paramount importance, in almost every case. It was with this knowledge that Dr. Vaughn was originally prompted to publish the Primer of Allergy in 1939. The value and popularity of this book is further evidenced by the now available Third Edition and its numerous reprints during the interim between 1939 and 1950.

Unless other means are available for transmitting necessary information to the patient with allergic disease, this book should be recommended for study to all intelligent patients. It is written in a manner that can be adjudged a reasonably good bedtime story. The knowledge and information contained therein is recognized and accepted by all competent allergists.

Further, for the student being initially exposed to the theory and practice of allergy, it is a highly helpful publication giving insight where a scientific explanation might prove initially bewildering.

Dr. Black's revision of the present edition has made what changes were needed by advances in knowledge in the field of allergic disease. Containing the extensive knowledge and experience of these two outstanding allergists, this book can be recommended not only to the general practitioner with a limited experience in the field of allergy, but also to the specialist.

Each of the eleven chapters are packed with readable, understandable information with Chapters X and XI emphasizing both success and failure in allergic management.—George S. Bozalis, M.D.

MEDICAL STATE BOARD QUESTIONS AND ANSWERS. Goepp and Flippin. Eighth Edition. W. B. Saunders Company, 1950.

This book is a Goepp and Flippin brought up to date. It is of peculiar interest to a candidate who wishes to prepare himself for examination, either written or oral. It is cordially recommended to those who may be interested in preparing questions or in answering them.

It is a cross section of review for anyone who is interested in the practice of medicine regardless of his qualifications. It affords an opportunity for a physician to take stock of his personal attitude toward recent trends of medicine. It is good practice for anyone to put himself, at least occasionally, in the hypothetical position and attitude of a candidate for examination.—Clinton Gallaher, M.D.

50 and 3

YEARS TREATING ALCOHOL AND DRUG ADDICTION

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MEDICAL ABSTRACTS

ERYTHROMELALGIA TREATED WITH POSTERIOR PITUITARY EXTRACT. Metz, M. Hill, Dept. Int. Med., Southwestern Medical College, Dallas, Texas; *Circulation* 1:684, April, 1950.

Erythromelalgia, a neurogenic vasomotor disturbance in the extremities, is characterized by increased redness and pain in terminal portions of the extremities, more commonly the feet, brought on by increased warmth and by dependency of the limb. "The pain is burning in character, and is aggravated by walking, standing and by covering of bedclothes." The author reports one case of this disease with marked and sustained improvement by the use of the vasoconstrictor effects of desiccated posterior pituitary powder taken by nasal insufflation after breakfast and at 5:00 P.M. in doses of one-third to two-thirds grain.

THE EFFECTS OF MAGNESIUM UPON CARDIAC ARRHYTHMIAS. Enselberg, C. D., Simmons, H. G., and Mintz, A. A., Cardiac Clinic, Gouveneur Hospital, New York City. *Am. Heart Journal* 39:703, May, 1950.

The authors studied the effects of intravenous magnesium SO_4 (20 cc of a 20 per cent solution, injected rapidly) on various arrhythmias of 25 patients, 24 of whom had either rheumatic, hypertensive or arteriosclerotic heart disease. A side reaction of subjective sensations of heat in the upper parts of the body was noted uniformly immediately after the injection, was a source of only mild discomfort. The magnesium was rapidly excreted, almost entirely by the kidneys, with complete excretion in four to eight hours in the presence of normal renal function. Beneficial cardiac effects were noted principally in reduction of ventricular extrasystoles associated with digitalis intoxication, this action seldom lasting more than a few minutes with occasional transient increases and rarely inducing a short paroxysm of ventricular tachycardia. No consistent effects on auriculo-ventricular conduction were noted so there is no indication to use magnesium in auricular tachycardia, fibrillation or flutter.

ARTERIOVENOUS FISTULAS OF THE LUNGS. Baer, S., Behrend, A., and Goldburgh, H. L. *Med. & Surg. Wards, Jewish Hospital, Philadelphia, Pa. Circulation* 1:602, April, 1950.

The authors point out the bedside clinical diagnostic features of this surgically curable disease, reporting two cases of their own and 23 cases reviewed from the literature. The probable relationship between pulmonary arteriovenous fistula of the lung and familial telangiectasis is pointed out, with at least 50 per cent of patients with the pulmonary arteriovenous shunt displaying vascular abnormalities elsewhere, such as telangiectasis, capillary hemangiomas and spider nevi, and also presenting a high incidence of vascular abnormalities in parents and siblings. Clinical picture—since a significant quantity of venous blood is shunted from pulmonary artery to pulmonary vein without oxygenation in pulmonary alveoli, oxygenation of the

blood is decreased and a characteristic triad of cyanosis, polycythemia and clubbing occurs. Hemoptysis and cough result from oozing or rupture of the aneurysms. Cerebral symptoms of headache, dizziness, tinnitus, convulsions and hemiplegia are seen in 50 per cent of cases, which may be secondary to thromboses from the polycythemia or cerebral vascular anomalies. Auscultation usually reveals pulmonary and cardiac murmurs; cardiac size is thought to be related to size of the shunt with its associated increase in blood volume and cardiac work. Chest X-Ray examination invariably reveals one or more abnormal lesions, circular, cylindrical or nodular in shape. Pulsation may be seen in the lesion or at the hilus or on the side of the lesion, are usually not progressive in size. Surgical removal, if possible, is curable.

THE EFFECTS OF POTASSIUM UPON THE HEART, WITH SPECIAL REFERENCE TO THE POSSIBILITY OF TREATMENT OF TOXIC ARRHYTHMIAS DUE TO DIGITALIS. Enselberg, C. D., Simmons, H. G. and Mintz, A. A., Cardiac Clinic and Med. Services, Gouveneur Hospital, New York City. *Am. Heart Jour.*, 39:713 May, 1950.

Using potassium chloride orally in doses of 2-10 Gms. in ventricular extrasystoles (mostly associated with digitalis intoxication) definite diminution in frequency of extrasystoles was noticed in about 30 minutes, maximal effect noted in one to two hours, the effects persisting for at least four hours, occasionally for eight hours and rarely for 24 hours. Auricular tachycardia was abolished in two patients, maximum effect noted at about four and one-half hours after receiving 10 Gms. of the potassium chloride-acetate equal parts mixture. In one case of auricular fibrillation the ventricular rate fell from 72 to 50 after 5 Gms. of KCl but remained irregular; while in another case of auricular fibrillation there was reversion to normal sinus rhythm 24 hours after potassium. In incomplete heart block the A-V conduction time was further prolonged after potassium.

The authors point out that K is rapidly absorbed from the GI tract, diffuses so rapidly from plasma to tissues that it is difficult to raise the serum K concentrations after moderate doses provided normal renal function is present. Excess potassium is rapidly excreted except in presence of renal failure. Doses as high as 10 Gms. increase the serum level only 1-2 mEq per L. Elevated serum levels returned to normal in two to two and one-half hours. It is felt the effectiveness of K in digitalis intoxication is due to a decrease in irritability of the myocardium plus a replacement of K in the myocardial cell, supposedly lost as a result of excessive digitalis. The beneficial effects of K in a patient with ventricular tachycardia were so striking that the authors feel it is the drug of choice to be tried in this arrhythmias.



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FOR SALE: Dictaphone. Dictating electronic model A.E. and transcribing machine CB. Practically new. Will sell at great sacrifice. Write Key M, care of the Journal.

TWENTY-FIVE YEARS AGO

(From Our Early Files of Editorial Notes—Personal and General).

DR. E. W. REYNOLDS, Bristow, was recently elected City physician, succeeding Dr. O. C. Coppedge.

DR. J. HUTCHINGS WHITE, Muskogee, is enjoying his trip to Europe, a card from London testifies.

DR. EVERETT S. LAIN, Oklahoma City, is taking some special work at Columbia University, New York, during June and July.

DR. A. J. WEEDN, Duncan, is erecting a new modern two-story and basement brick hospital, with a forty room capacity, with X-ray, etc., and all in-

stallations of the very latest patterns, including laboratory.

OTTAWA COUNTY MEDICAL SOCIETY, has purchased a camp resort on the Elk River, and plans to hold its meetings there in future as well as using the resort as an outing place for their families.

DR. FRED S. CLINTON, Tulsa, was elected President of the Medical and Surgical Society of the Santa Fe Railway at their 27th annual meeting in Denver, Colorado, June 22-23, 1925. There were eight states represented at the opening of the session.

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District No. 8: Tulsa.—M. J. Searle, M.D., Tulsa (C) 1951; W. S. Larrabee, M. D., Tulsa (V-C) 1951.

District No. 9: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner.—Shade Neely, M.D., Muskogee (C) 1952; F. R. First, Jr., M.D., Checotah, (V-C) 1952.

District No. 10: Haskell, Hughes, Latimer, LeFlore, Pittsburg.—E. H. Shuller, M.D., McAlester (C) 1953; Paul Kernen, M.D., Holdenville (V-C) 1953.

District No. 11: Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha.—A. T. Baker, M.D., Durant (C) 1951; L. E. Gee, M.D., Broken Bow (V-C) 1951.

District No. 12: Carter, Garvin, Johnston, Love, Marshall, McClain, Murray, Pontotoc.—J. H. Veazey, M.D., Ardmore (C) 1952; W. T. Gill, M.D., Ada (V-C) 1952.

District No. 13: Caddo, Comanche, Cotton, Grady, Jefferson, Stephens.—H. M. McClure, M.D., Chickasha (C) 1953; J. B. Miles, Anadarko (V-C) 1953.

District No. 14: Greer, Harmon, Jackson, Kiowa, Tillman, Washita, L. G. Livingston, M.D., Cordell (C) 1951; J. B. Hollis, M.D., Mangum (V-C) 1951.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE GENERAL PRACTITIONER

William Osler once said ". . . that flower of the profession — the general practitioner." In the editorial department of this *Journal* it has been pointed out that the nationalization of medicine in Great Britain has worked a hardship upon the general practitioner, in that he has been underpaid, overworked and denied the privileges of hospital practice. Under these conditions his cultural and scientific opportunities have been limited. He has little time to read; limited funds for cultural pursuits and he has been cut off from the valuable professional contacts incident to hospital service.

Likewise it has been pointed out that while the present administration in Washington is planning to follow a similar pattern of nationalization, its proponents are naively advocating a wider spread of that type of medical care in the United States now provided by the general practitioner. Is it not reasonable to anticipate the same mad rush, in this country for what the people think is free or already paid for, with the same sad overworked general practitioners sighing for time to care for the genuinely sick in a scientific fashion rather than the coercive kowtowing to the indiscriminate free service seekers who render them incapable of good work.

The following from an editorial in the May 27, 1950 *British Medical Journal* illustrates some of the difficulties the British National Health Service has encountered and the complicated and doubtful remedies suggested.

"It is apparent from the letters recently published under the heading 'The G. P. at the Crossroads' that general practitioners are concerned about the difficulty of maintaining a high standard of work in the National Health Service. The report (General Practice and the Training of the General Practitioner, 1950. Published by the British Medical Association. Price 7s. 6d) published today and summarized on another page,

of the B. M. A. Committee which has been considering the postgraduate education of general practitioners will therefore be read with special interest, and the Chairman, Sir Henry Cohen, and members of the Committee may be certain of receiving thanks of the profession for compiling the necessary sequel to the report (The Training of a Doctor, 1948. Published by the British Medical Association.) on undergraduate education which appeared two years ago. Unlike some sequels, the present report equals in interest and value the document which preceded it. After nearly two years of the National Health Service it has become increasingly clear that general practice has suffered and hospitals have benefited, at least financially, from the new regime. None can deny that the public will best be served by having a strong general-practitioner service, backed up by well-equipped hospitals. The present disparity between the development of general practice and hospitals is ultimately to the detriment of both. General practitioners have lost work which should be done by them, and hospitals have been burdened beyond their capacity.

Although the system of remuneration which has been adopted in the N.H.S. has been an important cause of the changing face of medicine, nevertheless it is within the power of the profession to counter the adverse forces by raising the professional status of general practice. The Committee came to the conclusion that the character and scope of general practice entitle it to rank as a special branch of clinical work, and that the personal and professional qualities demanded of a general practitioner are no less than those demanded of many specialists. They suggest that for the attainment and maintenance of a high standard of general practice a period of systematic postgraduate preparation for practice and opportunity for continued education throughout the period of active practice are required. The suggested postgraduate training for general

practice is to occupy three years after registration."

The following paragraph is from the Scottish Committee appearing in the *British Medical Journal* of June 3, 1950: "The report states that many competent and experienced doctors consider there is a real risk that the status of the general practitioner will be gradually depressed to that of case-finder for the hospitals, adviser on minor ailments, and purveyor of benefit certificates. Should this prove to be the case, there can be little doubt that the falling status will be accompanied by a falling standard. There would in time inevitably be an increase in the hospital out-patient department of the number of cases of a type which had hitherto been, and should properly be, dealt with by the general practitioner."

Apparently it would be well for our government to consider the danger of nationalized medicine, the resulting damage and the cost of repair, if such were possible.

IN THE NAME OF GOD—AMEN

In a rededication session at Plymouth Rock, the country editors of America heard in effect, this significant statement from their president. "We, the country editors, next to the clergymen and the doctors are in closest intimacy with the American people." Here in a resolution they re-affirmed their allegiance to the principles adopted by our Pilgrim Fathers and the signers of the Declaration of Independence.

How hopeful this, in a time when people must again learn to be brave. Considering the above statement of principles and position of influence, it seems wise to call attention to the following from Thomas Jefferson:

"I know of no safe repository for the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to increase their discretion by education."

Is it not time for the members of the medical profession to outdo the clergy and the press in an effort to bring about that "wholesome discretion" necessary to save America.

EMBARRASSING

Oscar R. Ewing must find the release of the United States good health statistics most embarrassing.

DECISION OR SHIPWRECK

May the memory of our valiant dead vivify the living and help us stand, with drawn sword, in the path of truth, ready to defend our profession and our people against the threatened blight of bureaucracy.

No matter what happens the members of the medical profession, accustomed to the voice of science, are entitled to one glorious hour of resistance to the annulling influence of Federal coercion.

This is freedom's most effective weapon and according to all indications, the psychological moment is approaching. To be useful in this difficult era we must leave a legacy of courage as well as one of honest professional effort.

Indoctrinated with the philosophy of truth, the medical profession should be immune to cowardice and militant in the pursuit of conscience.

Failing the stimulus of posthumous appeal to activate a lagging zeal, encrusting tears may obscure our vision as we pay the price of indecision. Submerged by the hopeless pall of political "salad" the victim may seek refuge in a "Salt Water Ballad."

"... says old Bill's ghost to me;
'It ain't no place for a Christian
Below there—under sea.
For it's all brown sand and shipwrecks,
And old bones eaten bare
And them cold fishey females
With long green weeds for hair."

TAINTED MONEY FOR A TINTED OFFICIAL

Oscar R. Ewing was awarded the annual \$1,000 prize of the Sidney Hillman Foundation. The presentation was made by Russian born Jacob Patofsky who succeeded Russian born Sidney Hillman as President of the Amalgamated Clothing Workers of America.

The name Hillman brings to mind President Roosevelt's glib remark, "Clear through Sidney." With the same reckless disregard for National welfare, Mr. Truman is hoping to tell the American Medical profession to clear through Oscar.

Those who wonder about the word tinted in this title should check the citations of the House Un-American Activities Committee and decide whether the idol of the red boys could escape a pink smudge.

Those not inclined to accept this kind of an Oscar had better stir themselves and in open opposition, make up for 10 years lost time.

SCIENTIFIC ARTICLES

OKLAHOMA'S FUTURE ROLE IN THE CANCER PROGRAM OF THE UNITED STATES*

SAMUEL BINKLEY, M.D., F.A.C.S.
LOS ANGELES, CALIF.

What can we say of the practical advances in the cancer field since 1940? The advances of the past 10 years can be placed into four broad categories:

First — The sulfa drugs and the antibiotics, plus improved anesthesia, blood transfusions and refinements in surgical technique, re-opened the question of more radical surgery on the advanced cancer patient; this in turn led to a more radical type of surgery in the early or favorable patients. This advance has been reflected in higher five year survivals and a drop in the cancer mortality rates, particularly in women, as published by the Metropolitan Life Insurance Company.

Second — Due to the rapid growth of cancer education, there was a wide-spread demand for new facilities, which led to the development of improved x-ray diagnostic and therapeutic equipment. There was also a demand for radiologists, internists, tumor pathologists and surgeons, so that more patients are receiving the benefit of expert diagnosis and treatment.

Third — The recognition of the role of the estrogens and androgens and chemotherapeutic compounds, such as the nitrogen mustards and others, re-opened an exciting field of clinical research and its varied therapeutic applications.

Finally — The atomic energy program has brought together all facets of the medical profession — surgeons, radiologists, pathologists and internists — into an adventure which has accelerated cancer research. Our interest in the fundamental problems of physiology and the chemistry of disease has reached such a pace that the next half of this century may see many unsolved problems answered that plague us in our daily practice. Oklahoma will play an important role, since some of the problems will be answered in your laboratories.

What may we expect in the next 10 years? Before hazarding an opinion, let us look at the broad foundation that has been

created for a cancer program in this country and consider the position Oklahoma may take in the overall plan.

What about socialization? — Prior to the entrance of the Federal Government in 1937 into the cancer picture, it may be said that the centers of cancer thought in this country were more or less localized to private agencies: The Memorial Hospital in New York, The Barnard Skin and Cancer Hospital in St. Louis, The State Institute for the Study of Malignant Diseases in Buffalo, New York, The Pondville State Hospital in Massachusetts, The Oncologic Hospital and The Jeanes Hospital in Philadelphia, and isolated programs in various university centers and large hospitals and private clinics.

The National Cancer Institute was founded in 1937 by congressional act and was the first of the special institutions in the United States Public Health Service. Congress appropriated money for a building and a modest program of fundamental research. Laboratories were built at Bethesda, Maryland. The National Cancer Institute program was expanded about 1946 by increased appropriations, Congress making funds available for grants-in-aid and fellowships. Today, funds for National Cancer Institute activities have increased to an annual rate of \$22,000,000. In 1937 the appropriation was approximately \$500,000.

What does such a staggering increase in federal cancer activities mean to the private practice of medicine? I do not have an available breakdown of these funds, but a brief review of some of the highlights as were brought out at the National Cancer Conference in Memphis this year reveals the following and gives us some basis for looking into the future.¹

The operations of the National Cancer Institute are divided into three major branches: intramural research, cancer control, and the division of grants-in-aid and fellowships. The intramural research, conducted primarily in the Institute building in Bethesda, is in the fields of biochemistry,

*Presented at the Program of Cancer Teaching, University of Oklahoma School of Medicine, December 14, 1949.

pathology, biology, radiology, endocrinology and chemotherapy.

The cancer control branch operates in several sections. The State aid section this year distributed \$2,500,000 according to a formula which involves the population of the State, the density of the population, the nature of the problem, and the per capita income of the inhabitants. The other sections of this branch are concerned with professional education, which includes the trainee program currently granting fellowships to 72 young doctors, in addition to lending technical assistance to State public health agencies. The same branch also is supporting the industrial environmental cancer survey and public health nursing activities.

The third major branch of N.C.I., namely, research grants and fellowships, today administers 250 grants-in-aid, approximating \$3,300,000, and supports, in addition, 140 fellows of both pre and post doctoral grades at a cost of about a half a million. The construction grants for teaching and research buildings are also handled by this section.

The funds of this branch, which go entirely to non-government institutions and personnel, support research that has been approved by the National Advisory Cancer Council. This is a non-government group of advisors who recommend expenditures to the Surgeon General. He may approve these expenditures but cannot overrule a negative action by the Council. This Council recently approved \$125,000 for the development of a 10-bed cancer research unit at the University of Oklahoma Medical School. Construction grants, which are also a matter for Council action, are used for increasing laboratory space, thereby accelerating the research program. Congress appropriated \$2,303,000 in 1948 and in 1949 increased this by \$8,000,000.

ATOMIC ENERGY COMMISSION¹

The cancer research program of the Atomic Energy Commission is primarily for determination of potential usefulness of radioactive isotopes in medicine. Several different programs are being conducted concurrently. About one-quarter of the money spent by the National Research Council for the Atomic Casualty Commission is for cancer research. This totals about \$323,000 for cancer. About \$1,000,000 is being spent in studying radiation as it relates to cancer. An additional \$200,000 supplies such radioactive elements as iodine, phosphorus and sodium, to cancer research investigators in

non-government institutions.

Among the various non-governmental sources of funds may be mentioned the following private agencies supporting cancer research:

THE DAMON RUNYON MEMORIAL FUND AND THE BABE RUTH CANCER FUND¹

Started by Walter Winchell in the middle of 1947, The Damon Runyon Memorial Fund has collected the large sum of over \$2,000,000 to date. Thirty-five annual grants totaling \$1,700,000 have already been distributed to institutions in 30 states. Damon Runyon money distributed by the officers of the Fund may be used for research salaries, equipment and expendable supplies, but not for bricks and mortar. Preference is shown for projects in areas where funds have been collected. \$25,000 has already been given to the Oklahoma Medical Research Foundation.

The Babe Ruth Cancer Fund, part of the Babe Ruth Foundation, may bring an amount around \$100,000 to the American Cancer Society, which it appears will be spent for cancer research bed activities.

JANE COFFIN CHILDS FUND¹

By a gift in trust of \$3,500,000, this memorial fund for cancer research was established in 1937 with headquarters in the Yale Medical School. Funds go for cancer research all over the world.

AMERICAN CANCER SOCIETY

The activities of the Society are supported from the income from the annual drive conducted in April by the 60 Divisions of the Society.

Since 25 per cent of the money which is collected is earmarked for the research program, approximately \$3,200,000 was available for the research program from last year's drive. This money is spent for fellowships, grants-in-aid and institutional research grants. Through its contract with the National Research Council, the Society is advised regarding a portfolio of grants-in-aid and fellowships. To make the selection, the Council has established the Committee on Growth, a group of 20 distinguished scientists, mostly medical doctors, who call on the assistance of approximately 100 research specialists in the fields of biology, chemistry, physics, chemotherapy, clinical investigations, and fellowships to evaluate the applications which are made to them. Currently they are recommending \$1,600,000 for grants-in-aid, leaving approximately \$200,000 for fellowships for the annual period beginning July 1, 1949.

According to the panel discussion at

Memphis, a recent analysis of the applications submitted to the Committee on Growth shows that their recommendations do not favor one section of the country over another but, if anything, tend to advise the establishment of grants-in-aid in those places where cancer research is more sparsely located. It would seem that Oklahoma is well located from this point of view.

The second approach to research is the grants-in-aid program of the American Cancer Society which has already received more than \$4,000,000 since its inception in 1945. The third approach to the research attack on cancer, namely, Institutional Research Grants, was inaugurated early in 1948. Already some 35 grants have been made at a cost of about \$1,500,000 for support of research in locations where laboratory investigations, hospital facilities, and teaching institutions are exerting their combined influence. Research salaries, equipment, expendable supplies, and cancer research beds are supported with these funds.

STATE PROGRAMS OF ADMINISTRATION OF FUNDS ALLOCATED TO CANCER¹

Currently, the Federal Government is distributing \$2,500,000 to 53 subdivisions of the United States to supplement the local agencies. The amount of money available to each state is small, 30 states getting a maximum of \$30,000 each. The formula used by the U.S. Public Health Service in distributing its funds has been examined recently, and it is found that money distributed in all categories shows a slightly higher ratio of funds granted to funds requested in areas where research is slight. Such a distribution tends to develop research potential throughout the United States. Oklahoma should qualify for this type of allocation.

Criteria are established so that research money is not used to support indigent and terminal patients. The patient who occupies a cancer research bed should be one whose case is particularly worth investigating because metabolic or other studies should be carried on to a degree not normally required by usual hospitalization.

With the government in the research business to an extent involving more than \$1,000,000,000, it was pointed out that research was "big business" and that institutions throughout the country should be prepared to carry their respective loads.

Your ability to integrate your fair portion of these grants with the aid that can

be obtained from the local, free, competitive enterprise of Oklahoma may well prove a working model for the nation if we are to avoid socialization.

In sections of this country, if schools are over expanded, people will become dependent upon government subsidy in all things, including education. We know that such a condition is dangerous and against our traditions. Here in the mid continent and in Oklahoma, great local wealth will, I'm sure, not permit the inroads of government subsidy and control, but will match funds for funds. This, in fact, is what the present Surgeon General, Leonard Scheele, has in mind — the stimulation of local free enterprise in research — not government subsidy and not federal control.

Big government is apparently with us and may continue to hand out more and more funds for research projects out of the taxes we all pay. This is no reason for us to throw aside our traditional American system of supporting institutions by private bequests or from private unrestricted sources.

It might be said on good authority that what you have already accomplished by individual effort has created no small stir among the councils controlling the flow of funds. So long as those councils are under lay control, the funds will go to those areas still willing to help themselves at the local level.

Your willingness to accept some aid, but not too much, may prove to be the magic formula, which could be adopted throughout the country. Your tradition for pioneering will enable you to build a firm foundation and to nourish your embryo research center into a vigorous adult which will help the private practice of medicine in this state.

Sources of financial aid have already been mentioned which offer a fair degree of unrestricted continuity, devoid of governmental appropriation.

I am sure that you, my friends, will preserve this growing medical center in the spirit of its founders and keep alive the traditional concepts of a free people. Such a future role in the cancer program of this country will strengthen our institutions and help us regain control of our unbalanced economy.

1. Preliminary Digest of Panel on Administration of Grants in Cancer — National Cancer Conference, Memphis, Tenn., February 25, 26, 27, 1949.

DEVELOPEMENTS IN TREATMENT OF MACROCYTIC HYPERCHROMIC ANEMIAS

*Report of a Case of Pernicious Anemia with
Sub-acute Combined Degeneration
Treated with Vitamin B₁₂*

VINCEL SUNDGREN, M.D.
TULSA, OKLAHOMA

The search for specific methods of treatment of disease remains one of the most stimulating challenges of medical science and the use of these developments in medical practice, when successful, is a most gratifying experience. Advances in specific therapy of infectious diseases have occupied a large portion of medical literature in recent years; however, newer developments in the treatment of the macrocytic hyperchromic anemias have also been of great interest to the medical profession.

Pernicious anemia which, with nutritional macrocytic anemia, constitutes the majority of cases of macrocytic hyperchromic anemia seen in this section of the country, is a disease which has always held a great deal of interest for the medical profession.

From the time of Combe's description of the disease in 1822,¹ a lapse of over 100 years occurred before Minot and Murphy conclusively demonstrated the beneficial effects of liver in pernicious anemia in 1926.² For approximately the next two decades, refinements in liver therapy continued with emphasis on the development of the potent injectable liver extracts. Then in 1945, Folic Acid (pteroylglutamic Acid) was found to be effective in producing a dramatic remission in cases of pernicious anemia³ and was widely distributed in 1946. It later became apparent, however, that folic acid often failed to prevent the development or progression of neurologic symptoms and that signs of neurologic involvement would develop suddenly in patients under therapy with folic acid. In 1947, an editorial entitled "A Warning Regarding the Use of Folic Acid"⁴ appeared, which caused many to discontinue the use of folic acid in the treatment of anemias.

The administration of thymine (5-methyl Uracil) was also shown to produce an hematologic response,⁵ but the amount required was so great that it was not a practical method of treatment, and, like folic acid,

it was unsatisfactory in treatment of the neurological lesions.⁶

In 1942, research showed that further purification of the "anti-pernicious anemia" principle in commercial liver concentrates could be effected.⁷ Further purification of this clinically active liver fraction led to the isolation of minute amounts of a crystalline compound which is being called vitamin B₁₂.⁸ Spectroscopic examination showed the presence of cobalt in the compound, and it was felt that the red color was, at least in part, associated with the cobalt-complex character.⁹ Polycythemia can be produced in many laboratory animals by the administration of cobalt, but cobalt ion has been tested in pernicious anemia by West with negative results.⁹ However, inasmuch as studies have shown that cobalt is an essential trace element in nutrition, it would appear that, as the mechanism of action of B₁₂ is further developed, the significance of cobalt will be further clarified.

The following case is of interest because of the regression of neurologic changes in a patient with pernicious anemia and sub-acute combined degeneration. Because it is felt that it does tend to confirm the effectiveness of vitamin B₁₂ in relieving the neurological lesions which have been reported by others,¹⁰ it is included in this report. This patient has also been followed for one year on therapy and has shown no tendency to relapse.

The patient, a 49-year-old white woman, was first seen at the Clinic on February 21, 1949. She was brought in in a wheel chair and her chief complaint was that of nervous trouble. She stated that for the past year she had noticed that she was not as well as she previously had been. Her illness was at first attributed to nervousness and "change of life," but she gradually became weaker. In December 1948, she slipped and sprained her ankle. Following this, she became unable to walk and couldn't tell where her feet were. She had also noted gradually increas-

ing numbness and tingling in her hands and arms, difficulty in feeding herself, using a knife and fork, combing her hair, and difficulty controlling her bladder. She had spent most of the previous two months in bed and stated that she was nearly helpless and had to be waited upon.

The past history and family history were negative. System review revealed rather marked constipation, complaint of chronic gaseous distention, tightness of abdomen and chest, and bladder symptoms as noted.

Physical examination revealed a pallor of the skin with slight lemon yellow color, mild atrophy of the tongue, moderate tenderness in the abdomen with distention and marked weakness. Neurologic examination revealed loss of bladder control, loss of vibratory sense, diminished tendon reflexes, and inability to stand because of marked ataxia and weakness. Hematological examination revealed the following findings:

Red blood count: 1,870,000

Hemoglobin: 7.5 gms.

White blood count: 3,850

Neutrophils: 38

Non-segmenters: 1

Segmenters: 37

Lymphocytes: 55

Monocytes: 3

Eosinophils: 4

Platelets: 157,080

Reticulocyte: 2.8 per cent

Hematocrit: 23 vol. per cent

Mean corpuscular volume: 123 u3

Mean corpuscular hemoglobin: 40.1 uu gms.

Mean corpuscular hemoglobin concentration: 32.6 per cent

Remarks: Anisocytosis and Poikilocytosis, Polychromasia, hyperchromia, macrocytosis, and multi-lobulated neutrophils.

Bone marrow examination revealed megakaloblastic hyperplasia of the bone marrow.

Ewald test meal revealed absence of free Hydrochloric acid before and following stimulation.

An x-ray series of the gastro-intestinal tract was negative.

The patient was hospitalized and started on treatment with refined liver extract, 1 cc. daily, and her reticulocyte count was checked at two to three day intervals. The highest reticulocyte count recorded was 13.6 per cent on the fifth day of treatment. On the day prior to discharge from the hospital, her red blood count was 3,260,000 and the hemoglobin was 10.4 gm. There had been no change or regression of neurologic signs

or symptoms, however. She was continued on refined liver extract and an effort was made to obtain vitamin B₁₂ for her. This was obtained about one week following discharge from the hospital, and she was started on 10 micrograms per day after 24 days of liver therapy. There was no evidence of regression of neurologic signs or symptoms at the time the B₁₂ was started, in spite of previous liver therapy. Following the second injection, she noted increased "heaviness" in her arms and legs, and after four injections she regained her position sense and was able to walk unassisted, though still with rather marked ataxia.

Following this, her neurologic signs rapidly regressed, but her volume index two months after institution of therapy was still 1.3 and color index 1.25. She was continued on intensive therapy for another month, at which time her volume index was 0.98 and her color index was 0.98. The importance of following the hematocrit in these patients has been emphasized repeatedly, as an index to predicting early relapse. Accordingly, her hematocrit has been followed at intervals since, but her volume and color indices have remained at 1.0 or below. Her red blood count and hemoglobin have remained normal. She is being maintained on 15 micrograms of vitamin B₁₂ every two weeks, and it is felt that this could be reduced to one injection per month at any time. Of interest, also, is the fact that the patient's hair, which was completely gray at the start of the therapy, has been gradually becoming darker. Inasmuch as medical literature and text books have often associated prematurely gray hair with pernicious anemia, it will be interesting to see if this occurs in other patients who are being treated with vitamin B₁₂. If so, it would appear that there is more than a casual relationship between these characteristics.

SUMMARY

A review of development of specific methods of therapy in the hyperchromic macrocytic anemias, with particular reference to pernicious anemia, is presented. From the case presented and from present literature, it appears that vitamin B₁₂ is a potent drug in the treatment of pernicious anemia and is especially helpful in treatment of those cases with subacute combined degeneration. It is felt, however, that it should be emphasized that with such an improved refinement in treatment, the diagnosis be made carefully and that these patients be followed in order to prevent future relapses. Ef-

forts must be made to educate these patients to the fact that they must continue their injections and that they must have periodic checks made of their blood.

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MEDICAL AND HOSPITAL INSURANCE IS THE ANSWER*

J. P. Cox**

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We in the hospital field have had an experience that all people connected with our health services should know about. I make no claim to being a prophet or the son of one, but my humble opinion is that prepaid medical and hospital plans are the answers to the Bureaucrats.

As I scanned my newspaper this morning, I noticed an item by the director of the Census stating our population would approximate 152,000,000. Whether we realize it or not, there are now 40,000,000 people in our country covered by Blue Cross. There are as many more covered by Commercial Insurance agencies. That adds to this, there is now, *today*, more than half our population that has seen fit to provide for themselves prepaid hospital and medical care on a voluntary basis. In fact, far more than is provided for by our Social Security program.

At our hospital, we are finding an increasingly large number of old age pensioners that have hospital insurance. This leads me to believe most of our indigents are that way for lack of opportunity and not by choice. If people are given a chance to provide for themselves, they will do so.

The medical and hospital professions have a greater stake in this than any other group. Our American people are going to have what

they want. All the proof you need for that is "more than half of them" already have it.

Hospital insurance has done something for hospitals that few realize. It has made the average wage earner a private room patient, at full pay. It has made the indigent a paying ward patient. But, let's not gloat over our growth. Let's look for some pitfalls ahead. I've known many people that were "allergic" to insurance of any kind. Either they or a relative or a friend had had an unpleasant experience with an insurance company. There are people that think the only way an insurance company would do an honest thing, would be by compulsion. The way some of our commercial companies reject claims is not helping this condition. Another thing the insurance companies will have to give attention to, is sending out untrained, unethical and dishonest salesmen. A person buys what the salesman "says." The company pays off on what is "written in the policy."

It would not be fair to either side without saying there are some dishonest policy holders also.—I've seen many appear at the hospital for elective surgery, within one week of the expiration of their exclusion clause. Everybody knows what that is. I've had others enter the hospital on their insurance that was, at that time, in grace. I've had others call on the phone or appear personally and ask where they could buy

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**President Oklahoma State Hospital Association

hospital insurance and further state, "it looked like they would soon need an operation." These are dishonest things, but if the insurance companies are going to accept the applicant on his statement and not require medical examination—it will behoove them to pay off and quit quibbling about "pre-existing conditions." My experience has been, that the worst possible credit risk is the patient whose insurance assignment has been accepted and then the company rejects the claim. This is most embarrassing to the hospitals.

We have a few doctors who resent filling out forms. I knew of one that slammed a form down on the desk and proceeded to let off steam for a minute or so about these ——— insurance companies. Well, to that I can only say, if the patient had the prudence to protect himself, the doctor better be plenty willing to fill out forms, or he may wind up filling out forms by government directive. We will never solve all our problems but under a system of free enterprise we can, in a measure, select the ones we choose to wrestle with. The A.M.A. should spend some money educating their profession on the proper use and misuse of Hospital and Medical Insurance.

The abuses of these programs are too often condoned by some members of the medical profession. There have been times that physicians would diagnose a case and the insurance company would reject the claim because of an alleged pre-existing condition. Occasionally the patients will ask their doctor to change the diagnosis: Too often, it has been done and the claim has been refiled. In many cases the insurance company has paid on the strength of the second diagnosis. Doctors should realize when they do such things, the insurance company immediately says, "Was he guessing the first time or lying the second?"—You don't get any credit for making an honest mistake.

Further, insurance rates are actuarialized on a specific risk for a specific rate of premium. If such things are permitted, they will break the insurance companies. Then we will be back where we started—or have a federal program. It is also bad because the

policy holder has been allowed to collect something for which he has not paid, which is equivalent to theft and worst of all, the doctor has become a party to the theft.

I was asked to say something about high hospital cost. Personally, I don't think hospital cost is any higher percentagewise than any other cost. I'll soon be 41 years old. In all my life, I never heard laymen speak of medical care in any other term, other than being "too high". When doctors were riding a horse or riding a buggy ten miles into the country and delivering a baby for \$10.00 it was "too high"—and still is. This does not alarm me at all. I know of no doctors that got as much of the world's goods as he should have gotten, based on his real worth to the community. I certainly know of no hospitals "in the chips". The big howl is not as much the cost, as it is "who is paying it?"

There was a time hospitals operated in the red, year in and year out. The community or the church or the fraternity made up the money to "bail out the hospital." At that time, the richest man in town got hospital care at less than cost. But he thought then, just as he thinks now—it was "too high", so he quit donating.

There was nothing left for the hospitals to do, but adopt business methods to insure their cost, which they did. Today when people use hospitals, they pay what it costs at the time they use it. Because, we long since learned philanthropy is not dependable.

I'm reminded of the old fellow, celebrating his 100th birthday. The newspaper sent a reporter out for a story—the reporter asked, "Uncle John, I guess you've seen a lot of changes." To which the old man replied, "Yes, and I've been ag'in everyone of them." I wonder if the trouble is—things are changing so fast we cannot keep up?

Let us not be afraid. Let us not yield but to the "pressure of excellency." Let us do the best we can with our problems with what we have to do. I believe when Blue Cross and Blue Shield and the prepaid principle is thoroughly understood, by the medical profession, hospitals and the public we will have the problem licked.

EFFECTIVENESS OF METHYLCELLULOSE IN GASTROINTESTINAL DISTURBANCES

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In the practice of gastroenterology, the average patient recites a whole series of complaints and symptoms involving gastrointestinal as well as other types of pathology. The patient with only one complaint or symptom is a rarity. Lower intestinal symptoms of considerable variety as well as some degree of constipation are almost always present. It has been my observation that the restoration of normal bowel function in these patients is accompanied by the disappearance of many vague symptoms such as muscular pains, neuritis, skin paresthesias, bizarre sensations, weak spells, emotional disturbances, headaches, dizziness, eructation, gaseous distention, and pressure against the heart.

While some gastroenterologists believe that constipation is automatically corrected when the diet and habits of the individual are changed, in my opinion, the treatment of constipation is not always so simple. It is seldom easy to change the habits of patients past 40 years of age.

The eradication of the enema and or cathartic habit is paramount before proper bowel stability can be established. Normal bowel physiology can usually be maintained by a smooth diet, rich in vitamins, proteins, fats, carbohydrates and minerals together with a bulk laxative which does not interfere with the absorption of the materials. The laxative should have a watery base and should produce a stool normal in consistency; it should be non-irritating and cause no griping or tenesmus; it should not be habit-forming and if prolonged treatment is necessary, it should produce no deleterious or toxic effects.

The hydrophilic colloids of marine origin, psyllium, and tragacanth derivatives fulfill most of these requirements; however, these are not always satisfactory inasmuch as they are difficult to ingest and are unpalatable.

Methylcellulose was recently introduced as a colloid laxative and since its reported properties approximate those of the ideal laxative, it appeared worthy of further study.

Methylcellulose is a synthetic derivative of cellulose and is used in large quantities in the food industry and to an increasing extent in the manufacture of pharmaceuticals as a thickener and emulsifier. Methylcellulose is non-reactive in vivo, because the hydroxyl groups forming the point of attack by the digestive enzymes or intestinal bacteria have been replaced by non-reactive ether linkages. Methylcellulose should not be confused with sodium carboxymethylcellulose, two distinctly different substances, since the former is non-reactive and the latter contains some reactive carboxyl groups. Laboratory studies show that this colloid laxative is non-toxic to rats which have been fed over prolonged periods of time.¹ It has also been demonstrated that it passes through the digestive tract of humans virtually unchanged and a large percentage of it can be recovered from the feces.² It forms a thin colloidal solution in the stomach and remains in this state until it reaches the colon where water is removed and a smooth demulcent gel results. It is not absorbed from the intestinal mucosa, is unaffected by digestive enzymes and is non-antigenic. It also presents a high degree of chemical uniformity frequently lacking in the natural gums.³

Using vitamin K as an indicator, Shapiro⁴ showed that the daily ingestion of methylcellulose over a period of three to six months did not interfere with the absorption of fat soluble vitamins.

Tainter⁵ was the first to use methylcellulose as a bulk laxative. Given in the form of fine flakes at a dosage level of 10 gm. per day, it produced stools almost double the previously determined control weight.

*Deceased March 26, 1950

Schweig⁶ prescribed 0.5 gm. tablets of methylcellulose at levels varying from one to six grams per day to 37 constipated patients. In general, the therapeutic response observed was remarkable; 34 cases had good to excellent results. Marks⁷ recently stated methylcellulose "to be a far more satisfactory laxative than any bulk material previously used for correction of constipation." Bargaen⁸ has reported that, in such conditions as the syndrome of irritable bowel associated with either constipation or diarrhea or intestinal stomas and the milder forms of intestinal infections associated with diarrhea, the addition of methylcellulose greatly improved the function of the bowel. He concludes that "methylcellulose represents a valuable addition to a well-ordered program of medical care for the conditions mentioned (constipation, irritable bowel), which often constitute the difference between happiness and unhappiness of the individual afflicted with that symptom."

EXPERIMENTAL PROCEDURES

The 102 cases studied, which form the basis of this report, were consecutive office patients who complained of lower abdominal discomfort or constipation as one of their symptoms.

After a complete physical examination, each patient was subjected to various laboratory and x-ray diagnostic studies before any therapy was prescribed. These studies included, when indicated, x-ray of the colon, stomach, gall bladder, chest and sinuses, basal metabolic rate, blood counts, Wasserman, test meals, urine and stool analyses, sigmoidoscopic examinations, etc. Physical examinations included observations on the patient's body build, appearance of tongue, emotional state, rectal examinations, etc. As was anticipated, patients presented a wide variety of gastrointestinal symptoms and many were observed to be suffering from more than one gastrointestinal complaint. Patients in immediate need of surgery, those with apparently incurable disease (carcinoma), and those with acute conditions (appendicitis, etc.) were excluded.

Appropriate medical therapy including methylcellulose* tablets was administered to each of the patients in this series. Constipation was classified as mild, moderate or severe, based upon the following criteria: mild — occasional strong cathartic or

enema necessary; moderate — one or two strong cathartics or enemas a week; severe — one or two strong cathartics or enemas a day.

Table I gives the results of treatment with methylcellulose based on severity of constipation.

TABLE I

RESULTS

Degree of Constipation	No. of Cases	Good To Excellent No.	Per Cent	Poor To None No.	Per Cent
Mild	34	30	88	4	12
Moderate	35	26	77	9	23
Severe	33	25	76	8	24
Totals	102	81	80	21	20

X-ray studies of the colon with barium enemas or air-barium technique were done on 83 of the 102 patients and on the basis of spastic, atonic or normal appearing colon, patients were so classified and the effects of treatment determined as shown in Table II:

TABLE II

X-Ray Appearance of Colon	No. of Cases	Good To Excellent No.	Per Cent	Poor To None No.	Per Cent
Spastic	22	17	78	5	22
Atonic	46	39	85	7	15
Normal	15	12	80	3	20
No X-ray studies	19	14	74	5	26

Among those individuals with spastic colon, who did not receive benefit from methylcellulose, was a case of long-standing arteriosclerotic heart disease and one of mitral stenosis. In these patients, it was considered unwise to administer sufficient fluids to hydrate adequately the methylcellulose.

The emotional status of these patients was carefully observed because of its possible relation to constipation and its treatment. Mild sedatives and antispasmodics along with other therapy were prescribed for the moderately nervous patients. Classification on the basis of emotional status and correlation with results of treatment yield the information recorded in Table III.

In Table IV results are given in terms of classification by the chief presenting gastrointestinal diagnosis. Eighty-six cases out of the total group of 102 are classified by this method.

*Tablets containing methylcellulose, 0.5 gm., under the trade name of Cellothyl were supplied by Chilcott Laboratories, Division of The Maltine Company, Morris Plains, New Jersey.

TABLE III

RESULTS

Emotional State	No. of Cases	Good To Excellent		No Benefit	
		No.	Per Cent	No.	Per Cent
Receiving shock therapy or sent to a sanitarium.	6	2	33	4	67
Moderately Nervous.	32	27	84	5	16
Mildly Nervous.	46	36	78	10	22
Normal.	15	12	80	3	20
Not Evaluated.	3	—	—	—	—

Although the number of cases in some of these groups is small, certain conclusions seem worthy of mention. Methylcellulose was an effective method of treating constipation if the colon was atonic, and was only slightly less effective in the control of spastic constipation. It was successful in 83 per cent of the cases of simple constipation, 87 per cent of peptic ulcer and 77 per cent of mucous colitis associated with constipation. It was also successful in controlling constipation in patients with diverticulosis and non-functioning gall bladder disease, although there were few cases in either group. Patients with gall stones reacted stubbornly to the treatment of their constipation.

AGE

The age of this group of patients ranged from 11 to 75 years; 44 patients examined were under 40 years and 38 of these (86 per cent) obtained excellent results with appropriate diets, hydration and methylcellulose; 58 patients examined were over 40 years of age and 43 of these (74 per cent) obtained excellent results with the treatment. There were 19 patients 60 years old or over, 84 per cent of whom obtained satisfactory results when their constipation was treated with diet, fluids and methylcellulose.

BASAL METABOLIC RATE

Since it is known that severe constipation may be associated with myxedema and that patients with severe goiter may have diarrhea as a dominant symptom, an evaluation of the patient's basal metabolic rate might offer information on the bowel status. Basal metabolic rates were determined on 58 of the 102 patients. Two patients in the series had questionably elevated (plus 15 and plus 18) readings. Twenty-five patients were in the metabolic range of between minus 10 and plus 10; eleven had low normal readings (minus 15 to minus 10) and six cases were truly hypothyroid but not to the extent of myxedema. In general, patients with either moderately high or relatively low basal metabolic rates responded to methylcellulose in the treatment of their constipation no differently than did those of the whole group.

GASTRIC ACIDITY OR ANACIDITY

Fractional Ewald or caffeine gastric tests were performed on 86 of the 102 patients. (The fractional caffeine meal was done ac-

TABLE IV

G. I. Diagnosis	No. of Cases	Degree of Constipation			X-Ray of Colon			Results		
		Mild	Moderate	Severe	Nor.	Spas.	Aton	None	Excellent to Good	Poor to No Benefit
Atonic Colon	27	10	9	8	2	—	25	—	23	4
Spastic Colon	15	3	4	8	1	14	—	—	9	6
Mucous Colitis	9	2	3	4	2	3	2	2	7	2
Gastritis	3	—	2	1	1	1	1	—	2	1
Pyloric Ulcer	2	1	1	—	—	—	—	2	2	—
Duodenal Ulcer	14	6	5	3	3	1	8	3	12	2
Diverticulosis	3	2	1	—	—	1	2	—	3	—
Constipation (unclassified)	6	2	3	1	3	—	—	2	5	1
Non-functioning gall bladder	2	—	1	4	1	1	—	—	2	—
Gall Stones	5	—	1	4	—	—	4	1	2	3

cording to the method of Musick, et al⁹). Forty-three cases showed a normal gastric response, while 37 showed hyperacidity with a level of free acid of 50 degrees or above, or 300 mgm. of total HCl in the one and one-half hour secretory phase, when caffeine was used as a stimulant. Eighty-one per cent of these patients with hyperacidity gave excellent response to treatment by methylcellulose, non-absorbable alkalies and diet. Six cases showed anacidity using the Ewald Fractional Test Meal. Of these six, only two showed an excellent response to methylcellulose. While this group was too small to draw statistical conclusions, hyperacidity did not appear to interfere with bowel response to the colloid. Those patients with anacidity on the other hand, did not respond to therapy in the majority of instances.

SIGMOID, RECTUM AND ANUS

Ninety-five of the 102 cases were examined rectally (digital) and on 25 patients, sigmoidoscopic examination was performed. Spasticity of the anal sphincter or moderate stricture of the anus was demonstrated in eight patients. The constipation of all these responded to methylcellulose, smooth diets and hydration. Three patients with relaxed sphincters also responded well. Twenty of the 95 patients examined rectally had external or internal hemorrhoids or both. All but one of these 20 patients with constipation had good results from treatment which included injection therapy of hemorrhoids together with methylcellulose, fluids, etc.

X-RAY OF THE GALL BLADDER

Gall bladder visualization was attempted in 84 of the 102 cases. Gall stones were demonstrated in five cases. All five patients were constipated, but three did not respond to the treatment. In 12 additional cases who were x-rayed following administration of a contrast substance, their gall bladders either did not take the dye or failed to shrink after a fatty meal. There was apparently no correlation between gall bladder function and the response of constipation to methylcellulose, for 10 out of the 12 cases responded favorably.

BODY BUILD

Some clinicians have stressed the relationship of body build to the occurrence of constipation. An arbitrary classification was made of the 102 patients on the basis of medium, slender and stocky build. Although differences in response to therapy were not marked, individuals with a stocky build appeared to respond slightly better than those

of slender or medium stature.

DIARRHEA AND/OR CONSTIPATION

Nine cases in the series had chronic diarrhea alternating with constipation. Methylcellulose proved valuable in controlling both the diarrhea and the constipation in the majority of these cases. Two patients had diarrhea following intestinal anastomotic operations; in one patient methylcellulose controlled the diarrhea effectively while in the other case it was unsuccessful. One patient with diarrhea which followed vagotomy also found methylcellulose beneficial.

DOSAGE AND DURATION OF TREATMENT AND COMPLICATIONS

All patients were started on from one to three tablets (0.5 to 1.5 grams) three times a day. Of the 102 cases treated, a few complained of a sense of weight or fullness in the lower abdomen. This symptom was relieved by reducing the dosage. Some patients found one to three tablets a day to be adequate for maintenance, while others required six to nine tablets a day. Many patients were eventually able to discontinue the drug entirely. Patients received methylcellulose for periods up to 325 days, representing 6,775 "patient days" or an average per patient of 66.3 days. Allergic reactions to the use of vegetable gums as bulk producers have been reported in the literature.¹⁰ It is therefore interesting to note that no allergic reactions developed in any patient in this series given methylcellulose. There were two fecal impactions in this series. However, it was not possible to show definitely that methylcellulose was a contributing factor. Both fecal impactions were easily eliminated with a gloved finger.

CONCLUSIONS

Methylcellulose was found to be a useful adjunct in the control of constipation in 80 per cent of 102 consecutive cases observed in an office practice of gastroenterology. It is convenient, pleasant to take, effective in the majority of cases and free of the disadvantages of the usual hydrophilic colloids of marine origin, psyllium correctives and tragacanth derivatives.

Methylcellulose was effective when used in either spastic or atonic constipation, in patients of all builds, in all age groups and in both males and females. It provided a useful adjunct in the therapy of mucous colitis, diverticulosis, chronic diarrhea, diarrhea alternating with constipation, constipation associated with peptic ulcer and gall bladder disease, functional cardiac states and many forms of neurasthenia. No con-

traindications to the use of methylcellulose were encountered in this series and it may be used in virtually all types of patients suffering from the many symptom complexes associated with constipation with one exception: no bulk forming agent should be used in conditions where intestinal obstruction is present or threatened.

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MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

"Common Sense from the Couch"—Donald M. Berwick—*Cosmopolitan*, June, 1950, page 50. The author is apparently under the care of a psycho-analyst and is fighting a battle for him so that more people will feel free to go to a psychoanalyst for help in all their problems. I liked this article because it was one of the rare ones written to uphold and commend a branch of medicine. Most of these articles are to tear down, criticize and degrade. His arguments are all good and his idea is that insane people aren't the ones that need to go but anybody that has some problem can be helped if they go to an ethical physician trained for this work. The comments that are given by this fellow's friends when he tells them about being psychoanalyzed, remind me of the stares and comments a few years back when the words gonorrhea and syphilis slipped out while a person was in polite society. Times and conventions do change.

"Heat Stroke and Heat Exhaustion"—Maxine Davis—*Good Housekeeping*, July, 1950, page 13. Another one of those prolific writers of Medical Arts and this one is good for a laugh or two. "Doctors speak of heat strokes and heat exhaustion as if they were two separate and distinct problems. Both situations, however, are a part of one process—the inability of the body to withstand the effects of heat. But because the second is far less serious than the first and because treatment is far less drastic, doctors differentiate." Then on the next page after discussing heat exhaustion she states, "Heat stroke is another matter altogether." I wonder if the background of this writer may be that of many people who say, "I started out to be a doctor but—". Most of the prophylactic measures recommended and some of her treatments are good. In discussing heat stroke she stated, "Put them in a tube of ice." Rather a sudden shock, eh what?

"Does Swimming Cause Deafness?"—Herbert and Dixie Yahraes—*Woman's Home Companion*, July, 1950, page 4. As the foreword to this article states, "Encouraging news for mothers who worry about this perennial summer problem and useful precaution for adults too. Here is the latest word on how to avoid ear trouble in the water." This is a very important subject which seems minor but brother when you try to keep the chillens from getting in the ole water hole it is a major problem in their minds. Same holds true when Junior wakes up in the middle of the night yelping with a sore ear. This is a very frequent question asked by the parents and the physician should have a good explanation. Read it if you have time.

"Let's Make Hospitals Safe for Children"—John Kord Lagemann—*Woman's Home Companion*, July, 1950, page 40. I want to commend the author of this article because I believe it is one problem that should be studied and hashed out to a great extent by physicians, hospitals and parents. It deals with the idea of placing a child in the hospital for treatment then suddenly shutting out the mother and father at once almost entirely. There is no doubt this makes quite an impression on the sensitive child and may result in psychic disturbances. They hear, see and smell all that goes on in the hospital. Much of this the physician doesn't even think of but to a small child it is frightening. How many times have you see a small child about to have his tonsils removed placed in a room with one already back from surgery who is screaming, crying and drooling blood. If the un-tonsilized child raises a little scene when his time comes, he is just a spoiled brat. They hurry him to surgery, meanwhile chasing the parents away. Then a putrid smelling mask is put over his face and bingo, he yells. What would you do if somebody slapped a mask on your face in a dark alley with no friends around. You'd yell and raise a little —.

Then people say, "Keep family away and kids get along better because the parents spoil them." If giving children love when under a mental strain is spoiling, I'm for spoiling them.

Read this article and think about the consequence on the child's emotion.

"More Years of Youth!"—Anne Fromer—*Coconut*, July, 1950, page 32. This is the story of Lyophilized Anterior Pituitary substance and Desoxycorticosterone Acetate in one group and ACTH and Cortisone in another group. These two groups are used as a balance for almost all diseases of older age and if the physician can get them back into their delicate balance the old man can kick up his heels again just like a youth of 20 or so. According to this everything is so simple. It is ridiculous to make a definite statement on something of this magnitude after two weeks observation. For instance, in the article it tells about three cases of lupus erythematosus and after five days of treatment the skin cleared up. In another two weeks nearly all the symptoms had disappeared. What the author failed to state was that a little later this physician published a scientific paper stating that two of these patients died and the third one had a marked relapse within four weeks. Of course, the readers of *Coconut* won't see this report. There is a great deal more publicity for this than the facts warrant.

PRACTICAL PRECAUTIONS DURING LABOR

BRUNEL D. FARIS, M.D.

OKLAHOMA CITY, OKLAHOMA

In the title of this paper I would like to have added "which have stood the test of time." The trouble could be that time changes many of the aspects of the treatment of the complications which come with labor, i.e., newer drugs for the use of caudal and other anesthetics, newer and more specific antibiotics, vitamins, etc.

There are a few simple procedures which I think have stood the test of time and always will, and I will start with what I consider the most important to the baby and follow with those having to do with the mother.

1. The baby should be held upside down immediately after the delivery for approximately a minute or two. This procedure hastens the spontaneous breathing of the child and gives gravity a chance to clean the mucous out of the larynx. It should always be followed by suction if possible with a simple syringe, and if not this, swabbing with your forefinger with sterile gauze as has been mentioned in the text books. A red baby has a good prognosis, a pale one does not, so that the use of the tracheal catheter is a very important step as soon as possible in a premature or pale baby and in a red baby which does not respond to the above simple procedures. If the upside down procedure is carried out correctly, spanking a child is rarely indicated and a simple rubbing of the baby's back may be all that is necessary to bring the first cry.

2. Always check your baby carefully before turning it over to the hospital for care. Too often a cleft palate, imperforate anus, a hypospadias or a simple birthmark is overlooked at the time of delivery to the embarrassment and possible suit to the attending physician. A surprising number of children are born with a congenital heart murmur or other defects which often are overlooked at birth. The same may be said of tonguetie and clubfeet overlooked. Always the attending physician can find time to do a circumcision for adherent prepuce. This operation is seldom indicated clinically, much less routinely.

3. The cord must be tied securely and since the clasps are not always obtainable and since there have been too many fatal

cord hemorrhages in the past, I must review the method of tying a cord. Tie about one-half inch distal with a wet tie, then strip the cord from the tie to the point of the second tie. Crush the cord with forceps and tie in this region, thus a double tie is made on the cord. Cases tied in this fashion seldom hemorrhage, but when and if they do, I do not hesitate to use a chromic catgut pursestring suture around the cord nearest the abdomen.

4. The baby must be warm and too often this point is overlooked; we forget the fundamental rules for the newborn, oxygen and warmth, and the oxygen must get to the lungs. The lower animals are aware of the importance of warmth to their young and will lie close or over their young for the first 24 hours of their life. I would like to repeat a statement that was made many years ago at this point, "The thinner the skin of a newborn, the less chance it has to live and the more warmth it will need at birth."

MOTHER

1. The less anesthetic a mother has at labor the better for her and the baby. It must not be forgotten that labor is old and physiologically safe and few women actually need an anesthetic much less too much.

2. Watch for signs of failing general health, before labor sets in; a rapid pulse and temperature shortly before or at the onset of labor are also important signs.

3. We should watch for signs of weakness before and most particularly at the time of labor. Lack of energy and the development of exhaustion may result in prolonged labor. Many times this is due to lack of nourishment during labor.

4. Glucose and rest does wonders in these cases. What has become of the old doctors who used to ask their patients to eat candy at the time of pre-labor stages? Even as important are the signs of exhaustion after labor which should be treated accordingly.

Finally may I add that few women will hemorrhage if they have been left alone to the natural laws of giving birth, and the simple test of an obstetrician is to know how and when to interfere with these forces.

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Medicine
HOWARD C. HOPPS, M.D. AND CLEVE BELLER, M.D.
OKLAHOMA CITY, OKLAHOMA

DOCTOR HOPPS: The case for discussion today represents a category of disease which, as you know, is becoming more and more important as our population becomes more and more aged. Today, cardio-vascular diseases rank first in cause of death with cancer running a close second. The patient today, a 59-year-old white male, presents a story and picture that is rather common in terms of cardiorenal vascular disease. Despite this, the case poses some rather interesting diagnostic problems. The majority of you who have studied the case have probably come to a differentiation between primary renal disease and primary cardiovascular disease. We will be interested in Doctor Beller's evaluation of this case and his conclusions.

PROTOCOL

PATIENT: J. S. N., 59-year white male; died 11 days after his only admission to University Hospital.

CHIEF COMPLAINT: Shortness of breath, nausea and vomiting.

PRESENT ILLNESS: The history as obtained from the patient was not felt to be reliable due to his state of confusion at the time of admission. As nearly as could be determined there had been dizziness, exertional dyspnea and precordial pain after exertion for the last 18 years. These symptoms were usually quickly relieved by rest. During this period the patient had been treated several times for hypertension at the Oklahoma State Veterans Hospital at Sulphur, Oklahoma. A letter from the attending physician there stated that the patient came to that hospital 11 days before admission to University Hospital with almost continuous vomiting and rather marked dehydration. All food by mouth was stopped and fluids were given intravenously, which largely corrected this condition. Shortly after admission, however, the patient developed "much discomfort, cramps, etc.;" then he suddenly developed hematuria; thinking this to be renal epistaxis, nothing was done and in

48 hours it all cleared up; urine specimen taken next day was negative for both sugar and albumin and did not even contain microscopic blood." Gastro-intestinal series (barium meal) was attempted but unsuccessfully — the patient vomited the barium. The doctor at Sulphur further stated that the patient had been treated there for hypertension for several years, that his heart was moderately enlarged, and that there was evidence of chronic passive congestion of the lungs.

FAMILY AND PAST HISTORY: Noncontributory save that the mother died of "hypertension" at the age of 73.

PHYSICAL EXAMINATION: Patient was a well developed, chronically ill white male with Cheyne-Stokes respiration. He was cooperative but not clear mentally. Skin and conjunctiva were pale; pupils were contracted. Blood pressure was 195/150 and pulse 96. Ophthalmoscopic examination revealed normal disks; vessels were tortuous — no hemorrhages were noted, but visualization was poor. There was a purulent postnasal drip. Both lung bases were dull and numerous moist rales were heard in the lower half of both lungs, posteriorly. The heart was moderately enlarged — apex in the sixth interspace, two cm. to the left of the midclavicular line; heart sounds were clear — A-2 was accentuated and there was a blowing systolic murmur at the apex. The pulse was at times bigeminal, other times regular. The liver was palpable five cm. below the costal margin. There was marked shifting dullness in the flanks and pitting edema over the sacrum and in the feet and legs. Tendon reflexes were active and equal.

LABORATORY DATA: On admission, urinalysis revealed 10-15 RBC's and 15-20 WBC's h.p.f., Hb was 9.5 gm. per cent and RBC's 4.0; WBC's numbered 50,250 with 95 per cent neutrophils. NPN was 140 mg. per cent CO₂ combining power 54 vol. per cent; serum and blood chlorides 530 mg. per cent. Total protein was 7.1 gm. with albumin 4.2 and globulin 2.9. Mazzini test was

negative. Four days after admission the urine had a sp. gr. of 1.006. There was 1+ proteinuria, 20-25 RBC's and innumerable WBC's, many in clumps. Six days after admission leukocytosis had decreased to 28,650 with 90 per cent neutrophils. On the fifth hospital day creatinine was 7.5 mg. per cent.

Roentgenograms of the chest revealed the heart to be markedly increased in size. The aorta was widened and calcified and there was considerable accentuation of hilar vascular markings. An electrocardiogram was interpreted as: At least moderate left ventricular hypertrophy and primary T-wave changes compatible with hypertension.

CLINICAL COURSE: The patient was digitalized with digitoxin and intravenous fluids were given. Because the urine gave 4+ benzidine reaction and was semi-solid, presumably related to the large number of pus cells contained, a retention catheter was inserted and the patient was given 50,000 units of penicillin every three hours. The number of white cells in the urine rapidly decreased, but urinary output did not increase, remaining less than 1,000 cc's per day. On several occasions 50 per cent glucose was given intravenously, but without appreciably altering urinary output. Throughout the patient's hospital course his temperature did not exceed 100° F. He failed gradually and died on the eleventh hospital day.

CLINICAL DIAGNOSIS

DOCTOR BELLER: This 59-year-old man presented symptoms of shortness of breath, nausea and vomiting — rather nonspecific complaints. There had been dizziness, exertional dyspnea and precordial pain for approximately the past 18 years. These symptoms were quickly relieved by rest, indicating that during this time they were probably of slight intensity. The patient had been treated several times for hypertension at the Oklahoma State Veterans Hospital at Sulphur, Oklahoma. It is important that no associated findings indicating disease of the urinary tract were described as a result of his studies there. The letter from the attending physician states that 11 days before the patient came to University Hospital he began to have almost continuous vomiting and rather marked dehydration. With a long history of hypertension followed by a period of vomiting, continuing on to the development of mental disturbance, one must consider that the patient had entered a state of uremia. Shortly after admission to the hospital in Sulphur he developed cramping abdom-

inal pain followed by hematuria. This cleared completely in 48 hours without treatment. It is important for us to realize that even small amounts of blood outside of its normal channel is irritating. We have many clinical examples of this—the vomiting that accompanies major hemorrhage into the gastrointestinal tract, the symptoms that occur with the rupture of an ovarian follicle in the mid-part of the menstrual cycle, and the frank neurological signs that follow cerebrovascular accidents. Therefore, we might think of this ureteral pain as a result of the hemorrhage which was manifest in gross hematuria. Let us postpone a discussion of the cause of this hemorrhage until later. A gastro-intestinal series was apparently unsuccessful because of the patient's vomiting. There was cardiac enlargement and passive congestion of the lung, indicating left ventricular failure. The breathing was of Cheyne-Stokes type, and we do not know whether this progressed to a true air hunger type of breathing. Diastolic blood pressure was 150, systolic 195. The diastolic pressure is perhaps of special significance since older clinicians maintain that with pure renal disease the diastolic pressure ordinarily does not rise over 130. On ophthalmoscopic examination retinal vessels were tortuous, but no hemorrhage or exudate typical of a chronic glomerulonephritis was noted. Examination of the nose and throat revealed a purulent postnasal discharge. Both lung bases were dull and moist rales were heard in the bases. There was moderate cardiac enlargement with an accentuated second sound and a systolic murmur at the apex. Apparently these systolic murmurs which occur over the apical region at the time of failure are on the basis of dynamic effects rather than organic valvular change. The pulse was bigeminal at times, which probably was due to digitalization. Other signs of cardiac failure including pitting edema and a palpable liver were present. We are not told of the results of rectal examination and must therefore assume that the prostate was normal in size.

As to laboratory data, urinalysis revealed a microscopic hematuria and pyuria. The only significant thing in the blood count was the leukocytosis of 50,000. Apparently these were all mature cells and thus do not represent chronic leukemia. The NPN was 140 mg. per cent, a markedly elevated figure. As to the elevation of the white count, apparently no cause was found; it is very questionable whether hemoconcentration

might produce such a striking elevation. The blood chlorides and CO_2 combining power were barely outside the range of normal. One plus protein in the urine might well go along with the cellular contents to which we have previously called attention. The note says that four days after admission the urine had a specific gravity of 1.006. This is important because uremia is generally preceded by oliguria with a urine of low specific gravity. Authorities state that the kidney must be able to concentrate urine to a specific gravity of 1.012 and maintain a urinary volume of at least 600 cc's daily to keep the blood clear of excess nitrogenous waste products. Six days after admission the patient's leukocytosis had decreased to 28,000—still with a marked increase in neutrophils. On the fifth hospital day the creatinine was elevated to 7.5 mg. per cent. Recent investigative work would suggest that the ratio of glomerular to tubular excretion of creatinine is about 3:1. Since this creatinine level is approximately five times elevated and since it is one of the last signs of glomerular insufficiency to develop, it would certainly indicate a marked destruction of the patient's glomeruli. The aorta was widened and calcified with accentuation of hilar vascular markings. Early in hypertension a lengthening of the outflow tract of the left ventricle occurs. This is followed by hypertrophy of the myocardium. An electrocardiogram was interpreted as exhibiting moderate left ventricular hypertrophy, which was compatible with the clinical findings. Following the patient's course we are told that a urinary retention catheter was inserted and the patient given 50,000 units of penicillin every three hours, apparently on the basis that a urinary tract infection existed. On several occasions 50 per cent glucose was given intravenously without significantly altering the patient's course. His temperature did not exceed 100 and after failing gradually he expired on the eleventh hospital day. Since this was a steady downhill course without dramatic events, we must assume that he died from the condition for which he was admitted to the hospital.

Let us now go back and attempt to pick up a few points before we turn the meeting back to Doctor Hopps for the autopsy findings. Since this man had been seen by competent physicians who could not find a cause for his hypertension, we must presume that this would fall into that vague classification of essential hypertension. If we make that

diagnosis, then we must see if his life span is compatible with it. Probably the majority of these people with hypertensive disease will be dead 10 years after they begin to have subjective symptoms, and it has been estimated that the bulk of them have hypertension for eight to 10 years before subjective symptoms develop. The life span therefore would probably not exceed 20 years. When the diastolic pressure remains about 120 mm. at several consecutive readings, usually the patient is entering the malignant or terminal phase of the disease. Doctor Fishberg has called attention to the fact that the renal arteriolar changes that go along with essential hypertension produce microscopic and macroscopic bleeding rather frequently. This might then explain this patient's episode of hematuria. As you know, hypertensive patients usually die either of cardiac failure, a cerebrovascular accident or renal insufficiency. Therefore, to sum up the situation, our diagnosis would be *essential hypertension with death due to uremia*. For differential diagnosis we might consider a *pyelonephritis of long standing*. Unfortunately we are not given a history of urinary tract infection, although on admission to University Hospital there was a persistent pyuria. It is regretted that we are not given bacteriologic studies on the patient's urine to determine whether a pathogenic organism was present. The interstitial reaction that accompanies pyelonephritis is capable of producing arteriolar changes similar to those observed in essential hypertension. In considering the possibility of other primary renal disease we are not told if the prostate was enlarged, but there is no evidence for a blocking of the urinary tract from this condition with resultant hydronephrosis. There are no findings to suggest polycystic disease of the kidney.

The last consideration would be that of diffuse arteritis, possibly *periarteritis nodosa*. The chronic course and lack of fever are against this. In conclusion we will make our final diagnosis that of essential hypertension, malignant phase, with death due to uremia.

CLINICAL DISCUSSION

QUESTION: Could this represent an exacerbation to acute glomerulonephritis?

DOCTOR BELLER: No. The urinary findings are not characteristic of those seen in a chronic glomerulonephritis. The normal serum protein would also be against such a consideration. Furthermore, the eye ground findings are those that might be expected in

essential hypertension rather than an chronic glomerulonephritis.

QUESTION: Would you comment on the high white count in the absence of fever?

DOCTOR BELLER: I would have only one explanation which would be that the patient might have developed a terminal bronchopneumonia or a mild urinary tract infection.

QUESTION: How could you explain the CO_2 combining power of 54 volumes per cent in the face of a postulated acidosis and with marked renal insufficiency?

DOCTOR BELLER: From the description of the clinical course I cannot give a good explanation of this finding. It is difficult to determine whether he was given alkali sufficient to maintain a normal CO_2 combining power during his hospital course. Certainly the kidney malfunction of uremia is ordinarily accompanied by frank acidosis.

In this connection, a very brief comment might be made about the treatment of uremia. This patient had reached the point where renal changes were probably irreversible. Therefore, definitive therapy could not be carried out and only symptomatic treatment consisting of sedation, fluids and chemotherapy would be indicated.

ANATOMIC DIAGNOSIS

DOCTOR HOPPS: At the time of autopsy the patient was well developed, and fairly well nourished—there was approximately 1 cm. of adipose tissue in the midabdominal line. We found evidence of the congestive failure which Doctor Beller postulated. There was considerable pitting edema of the lower extremities and over the sacrum; there was a shallow decubitus ulcer over the sacral region too. When the perineal cavity was opened it contained 1,800 cc's of a serous fluid with specific gravity of 1.007. Of course this was a transudate, representing edema of the abdominal cavity. Each pleural cavity contained a considerable amount of fluid as well; 900 cc's in the right, about a liter in the left. In addition to the pitting edema of subcutaneous tissue then, there was a considerable amount of edema fluid in the various serous cavities as well. The abdominal viscera presented no significant abnormality. It had been reported that the liver was down some when the patient came into the hospital, but probably as an effect of his therapy it was no longer down below the costal margin at time of autopsy. The heart, as was indicated in the roentgenogram, was considerably enlarged. When the pericardial cavity was opened numerous fibrinous adhesions were encountered, which is not sur-

prising since fibrinous pericarditis often accompanies uremia. The heart was moderately dilated as well as hypertrophied; it weighed 715 gms., a little over twice normal. The left ventricle was preponderant; it was thickened up to two cm. despite dilation. The apex was quite rounded. There were no valvular abnormalities so that the obvious explanation for this work hypertrophy was the hypertension that had been described clinically and observed over a period of years. The lungs were considerably increased in weight. The right weighed 875 gms. and the left 700 gms., almost three times the normal weight in each instance. There was moderate chronic passive congestion, considerable edema and hyperemia and much lumpy induration of dependent portions in a manner characteristic of hypostatic pneumonia.

Despite the fact that the liver did not extend below the costal margin it weighed 2,400 gms., representing a 60 to 70 per cent increase. It presented a picture of nutmeg mottling, the characteristic effect of chronic passive congestion. The spleen weighed 200 gms., being about 30 per cent enlarged. It presented the gross appearance of so-called cyanotic induration, again a characteristic of chronic passive congestion.

Turning to the urinary system, the urinary bladder did not present remarkable changes, nor did the ureters; there was no gross evidence of any significant infectious process. The kidneys weighed 225 and 200 gms. respectively, approximately 35 per cent increase over normal. Their surfaces were finely granular and speckled by an occasional petechial hemorrhage. The capsule stripped with moderately increased difficulty. The renal pelves appeared essentially normal; there was no exudate, thickening, granularity, etc. Nor was there hydronephrosis. The infection of the urinary tract indicated by the patient's history (if it actually occurred), must have been an acute one which responded to antibiotics and from which the patient recovered prior to the autopsy. These were the major findings. There were no changes in the colon, which is not unusual since colitis occurs in considerably less than half of the cases of uremia. Uremic pericarditis, on the other hand, occurs in approximately 50 per cent of patients dying of uremia.

To summarize these gross findings, we actually have little more information than we had before the time of autopsy—there is evidence of hypertensive disease, evidence of congestive heart failure and evidence of

something being wrong with the kidneys. The question still remains—is the primary basis for this disease renal or vascular? The kidneys which were moderately enlarged and finely granular, from the gross appearance alone might represent either the *effects* of hypertension, i. e., arteriolonephrosclerosis or the *cause* of hypertension, e. g., glomerulonephritis.

It remained for histopathologic studies to settle the problem and these I will demonstrate with the microprojector. As you can see, the major changes in the kidneys are *vascular* and these affect principally arterioles and small arteries. There is marked proliferative thickening of these small vessels with correspondingly marked decrease in their lumina. This is the typical appearance of hyperplastic arteriosclerosis which is the vascular change occurring in the fixed phase of hypertension. Superimposed upon this we see that some vessels exhibit a peculiar eosinophilic change of the media with complete obstruction of the lumen—sometimes with, sometimes without thrombosis. This is the so-called fibrinoid necrosis or thrombo necrosis of arterioles which is the pathologist's morphologic evidence of the *malignant phase of hypertension*. As a re-

sult of these numerous arteriolar occlusions there occurs, in effect, infarction of individual glomeruli with resultant minute hemorrhages (hematuria) and often, as in this case, sudden marked renal failure with uremia and death. Malignant nephrosclerosis, together with terminal bronchopneumonia, represent the precipitating cause of death in this patient—as Doctor Beller had postulated.

Our final complete pathologic diagnosis is as follows:

1. Hypertension, malignant phase, characterized by cardiac hypertrophy, marked, predominantly left ventricle; hyperplastic arteriosclerosis and malignant nephrosclerosis.
2. Uremia (clinical diagnosis) characterized by fibrinous pericarditis.
3. Ascites, marked, hydrothorax, bilateral, marked, and pitting edema of lower extremities.
4. Passive congestion, chronic, of lungs, liver and spleen.
5. Bronchopneumonia, hypostatic, bilateral, moderate.
6. Infarcts, hemorrhagic, pulmonic, multiple.
7. Decubitus, sacral.

MEET OUR CONTRIBUTORS

Vincent Sundgren, M.D., Tulsa, wrote "Developments in Treatment of Macrocytic Hyperchromic Anemias" in this issue. Graduated from the University of Kansas in 1943, he was associated with the Cleveland Clinic Foundation before coming to Tulsa. Limiting his practice to his specialty, internal medicine, he is a member of the Tulsa County Internists Society. Doctor Sundgren was graduated from the University of Kansas in 1943.

Brunel D. Faris, M.D., Oklahoma City, is the author of "Practical Precautions During Labor" in the August Journal. He was graduated from the University of Oklahoma School of Medicine in 1927 and limits his practice to his specialty, obstetrics and gynecology. He is a member of the Central Association of Obstetrics and Gynecology, the Oklahoma City Association of Gynecology and Obstetrics, and is Associate Professor of Obstetrics at the University of Oklahoma School of Medicine. He is Chief of Obstetrics at Penconess Hospital.

Samuel Binkley, M.D., F.A.C.S., Los Angeles, Calif., has an article on "Oklahoma's Future Role in the Cancer Program of the United States" in this issue. A graduate of Harvard Medical School in 1932, his spec-

ialty is oncology. He is a member of the American College of Surgeons, California State Medical Association, American Radium Society, James Ewing Society, American Association for the Advancement of Science, American Association for Cancer Research. He was formerly a member of the staff of Memorial Hospital, New York, and is now a member of the staff of the Los Angeles Tumor Institute. He is chairman and chief of the Tumor Clinic, California Hospital and consulting oncologist, U. S. Navy.

J. P. Cox, Muskogee, President of the Oklahoma State Hospital Association, and member of the Executive Committee, Midwest Hospital Association, wrote "Medical and Hospital Insurance is the Answer" in this Journal. Mr. Cox is Administrator of Oklahoma Baptist Hospital.

Fern H. Musick, M.D., who died March 27, 1950, wrote the article that appears on page 360 before his death. Doctor Musick was associate professor at the University of Oklahoma School of Medicine and specialized in gastroenterology. He was graduated from the University of Missouri in 1921 with a B.A. degree and received his M.D. degree from Northwestern University in 1926. He served his internship at Kansas City General Hospital in 1926. He was a member of Sigma Xi.



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President's Page

The 99th Annual Session of the American Medical Association, which was held in San Francisco, California, from June 26-30, 1950, brought to that fair city some 25,692 persons. Of that number 10,241 were physicians and 13,536 were guests. This was the third largest attendance in the A.M.A. history and this meeting will no doubt be recorded as a memorable occasion for several reasons. The foremost perhaps being the radio broadcast, the newsreel recording of the President's Inaugural Ceremony and the institution of the new custom of administering the oath of office to the new president.

Dr. Elmer L. Henderson of Louisville, Kentucky, was inducted into the office of President and his address was broadcast over two national radio networks to the people of every state and into every corner of the country. He stated in his opening remarks that the vital reason for this new policy is that our affairs are no longer just medical affairs. They have become of compelling concern to all people and American Medicine has become the blazing focal point in a fundamental struggle which may determine whether America remains free or whether we are to become a Socialist State under the yoke of a government bureaucracy dominated by selfish, cynical men who believe that the American people are no longer competent to care for themselves. He also pointed out that State Socialism is the principle issue and American Medicine is the first objective of the Socializers. The present system of free enterprise in medicine has led the world in medical advances and has helped to make this the healthiest and strongest nation on the face of the globe and has been made the first major objective of those ambitious men in Washington. They have made American Medicine a target for the barbs and criticisms of a comparatively small group of little men; little men whose lust for power is far out of proportion to their intellectual capacity, their spiritual understanding, their economic realism or their political honesty. It seems obvious from these few quotations that the A.M.A. has a very courageous leader for the coming year.

There was a spirit of unity which seems to prevail throughout the business sessions of the House of Delegates. Doctors are united today as perhaps never before. While there was free discussion of all resolutions and amendments, it was usually constructive in nature. The delegates labored diligently through the long sessions. More than 70 resolutions were presented and voted upon in the third day of the meeting. Of particular interest to all physicians who are wondering about their dues of \$25.00; it can now be reported that an intensive educational program will be presented in October, the month prior to the November election, using some 5,200 newspapers in all parts of our country, the radio networks and the leading magazines. Also beginning January, 1951, all of those who have paid their A.M.A. dues will receive the A.M.A. Journal.

The final session of the House of Delegates was likewise very harmonious. Dr. John W. Cline of San Francisco was chosen as President-Elect and Dr. R. B. Robins of Camden, Arkansas, as Vice-President. Both men were unopposed in the election and were elected by unanimous vote. This tribute comes to both these doctors as an honor for their years of service and outstanding leadership in our profession. Doctor Cline in his fighting speech re-emphasized the necessity of all doctors whether in the cities, the small towns, or even the grass roots, to unite in the field of American Politics stating that we are engaged in a great conflict between two ideologies; traditional American liberty and coercive statism.



President.

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Special Article

PRESIDENT'S ADDRESS*

OKLAHOMA STATE MEDICAL ASSOCIATION

RALPH A. MCGILL, M.D.

TULSA, OKLAHOMA

It is, indeed, a great privilege for me to have been selected as President of your Oklahoma State Medical Association for the coming year. I would, first of all, express my appreciation to those who have given me this cherished honor — appreciative of the confidence which they have placed in me to lead this fine progressive organization.

I enter upon my duties in a spirit of great humbleness, well aware of the responsibilities which are now mine. I cannot hope to attain in the next twelve months the success of the administrations which have preceded mine, nor ever gain the measure of high respect in which we hold those splendid gentlemen of medicine who are our past presidents.

The Association has been honored in having Dr. George H. Garrison as its President for the past year. He has been an able, wise, and courageous leader, fully justifying the wisdom of the House of Delegates in selecting him for this office. His success comes as a surprise to none of us; few men have entered office with such a full measure of respect and confidence as did Dr. Garrison. That he leaves office with an even greater degree of respect is testimony to his rare abilities, and evidence of the debt which we owe to him. I am in much the same position as an early President of these United States, John Adams, who was advised of his election to the Presidency with the words, "Mr. Adams, you have been selected to replace George Washington." To which, the venerable old wise man of New England replied: "I can only succeed George Washington; no man can ever replace him." And so it is with me. I can only succeed Doctor Garrison. No man can ever replace him.

I hope to repay in my year of service,

in some small measure, the great debt I owe to medicine. Medicine gives a man an opportunity to follow, if he will, a great way of life that has been developed by generations of other men — generations dedicated, as in almost no other tradition, to the service and welfare of their fellowmen. That any measure of success is recorded in my desire to repay a profession which has so richly rewarded me with the satisfaction of objective living, will be due entirely to your help and cooperation. Without your aid, collectively and individually, and your loyalty and advice, I cannot hope to accomplish the task which has been set. The load would be too heavy.

We are living in an age of tremendous unrest and change. Formidable forces are at work with devastating rapidity. New instruments of science are transforming our lives; new currents of thought are shaping our social and intellectual destinies. The efforts of modern man to keep his place in this bewildering parade have left a large portion of us tense, anxious, confused, insecure, and, I fear, willing to accept subsidy.

Indeed times have changed for the medical profession as well as other businesses. New drugs are constantly being discovered. Many diseases are being removed from the lists of incurables. Magnificent hospitals are being constructed. Scholastic requirements for doctors are being steadily increased. Specialists are being developed in almost every field; all for the public good. Through it all the ideas of the profession have never changed, and the spirit of the physicians of the past is alive and manifest in the lives and practice of our American doctors today. Through the steady progress in the scientific field of medicine and because of the fundamental ideals of the profession, more people have access to better medicine

*Presented at the President's Inaugural Dinner at the Annual Meeting in Oklahoma City June 6, 1950

than ever before in the history of man.

Then why this tumult of criticism of doctors. Why the hue and cry of an unsatisfied minority for the destruction of the present system of American medicine. What have we done to deserve this treatment. What have we left undone to merit this castigation. Is it that we do not give our patients enough attention? Are our charges exorbitant?

We, as doctors, have kept abreast in our profession in a scientific way; but, perhaps we allowed the rest of the world to pass us by. How about our interest in civic problems. Do we fulfill our obligations in the field of politics. Are we interested and informed in the field of labor relations. What concern have we shown about the problems of the farmers, the oil men, and other business men. What have you and I done about following the suggestions of our local and national organizations as to means of combating compulsory health insurance. Or have we said, "Let George do it". It seems a natural impulse for physicians to be individualistic without giving thought to the potentialities of the group to which they belong. Proponents of Socialized Medicine are aware of this and find it useful in their fight.

We in recent years have recognized the importance of public relations but our efforts have been woefully inadequate. We have devoted ourselves to scientific aspects of medicine and closed our eyes to the demands of our fellowmen in other walks of life. Have we not assumed that the world will continue to pay homage to our profession despite our failure to share the obligations imposed on all citizens of our free country. Have we not been blind to the fact that our profession has been gradually encroached upon by other organizations. We have also been too busy to realize that the public has been skillfully propagandized to question the integrity and ability of the very ones who have devoted their lives to making this the healthiest nation in the world. So, it is time for every member of the medical profession to come out of his or her ivory tower and fight for the things in which we believe.

We must put our houses in order. Only in this way can we strengthen the traditional American forces that will oppose the socialistic trends in our country. We must cooperate with the druggists, the dentists, the nurses, the hospitals and all allied groups in an effort to maintain our present status

in the field of medicine. In this way we may weed out all factors and forces which will give aid to the proponents of government medicine.

I am not one to hide behind the delusion that an immediate defeat of the proposals for federal compulsory health insurance will cure our ills. Neither must you be. Rather, we must go deeper into the basic problems which tend towards the acceptance of such proposals, for these problems are the basic problems of medicine today. However difficult it may be to recognize and admit our shortcomings, we must do so, approaching with an ever increasing intensity the vital questions of rising medical costs, unequal and inadequate distribution of medical care, the peculiar problems of modern medical education and the excesses of specialization, and the fleeting insecure character of the doctor-patient relationship of today. Individually, we must search our innermost selves for assurances that we are meeting our traditional obligations.

We should strive to be continuously and progressively scientifically competent, to remain free and unrestricted in the discharge of all of our duties to the community, to combat those interests that would enslave or injure the profession and its efficiency, to be alert to the best traditions of medicine and to the advancement of private practice, and to protect and guard the health of the community in which we live. These are the objectives of organized medicine today. As your President, insofar as I am able, I shall see that these objectives are embodied in the program of the Oklahoma State Medical Association for the coming year.

However, I propose no innovations in the program of activity which the Association has built up over nearly half a century. Rather, it is my hope that we may continue to enlarge upon the good work which has already been done. It is my desire, and I trust, yours as well, to formulate a program geared to the economic, social, and political conditions which affect modern medicine, and in particular, Oklahoma Medicine today.

May I again humbly express my thanks for the honor which has been conferred upon me, and may I accept with humility this mantle of responsibility, hopeful that I may with your help continue to zealously guard the priceless heritages of American Medicine.

ANNOUNCEMENTS

BASIC SCIENCE BOARD. Date for examinations to be given by the board has been set for September 15, 1950 at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma. Registration will begin at 7:30 a.m.; examinations will begin at 8:00 a.m.

NATIONAL GASTROENTEROLOGICAL ASSOCIATION. Postgraduate course in gastroenterology will be given at the Hotel Statler, New York City, October 12, 13, 14, 1950. For further information and enrollment write the Association, Dept. G8J, 1919 Broadway, New York 23, N. Y.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1 and 2, Oklahoma City.

POSTGRADUATE COURSES IN ANESTHESIOLOGY, PSYCHOSOMATIC MEDICINE. Anesthesiology, September 18, 19 and 20, 1950. Psychosomatic Medicine October 30—November 1, 1950. University of Kansas School of Medicine, Kansas City 3, Kansas.

SOUTHWESTERN SURGICAL CONGRESS. September 25, 26, 27, 1950. Denver, Colorado. For additional information write 632 Republic Building, Denver 2, Colorado.

INTERNATIONAL COLLEGE OF SURGEONS. United States Chapter. Fifteenth Annual Assembly and Convocation in Cleveland, Ohio, October 31, November 1, 2, and 3, 1950. Programs can be obtained from Arnold S. Jackson, M.D., Secretary, Jackson Clinic, Madison 4, Wisconsin.

NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS. Annual Convention, October 26, 27 and 28, 1950, Stevens Hotel, Chicago.

AMERICAN COLLEGE OF PHYSICIANS. Thirty-second Annual Session, April 9, 13, 1951. St. Louis, Missouri.

NORTH TEXAS-SOUTHERN OKLAHOMA FALL CLINICAL CONFERENCE. September 20, 1950, Wichita Falls, Texas. Registration fee \$7.00 includes meals. Hotel reservations may be obtained by writing E. A. Cox, M.D., 203 Hamilton Building, Wichita Falls, Texas.

MISSISSIPPI VALLEY MEDICAL SOCIETY. 15th Annual Meeting, Elks Club, Springfield, Ill., September 27, 28, 29, 1950. **AMERICAN MEDICAL WRITERS ASSOCIATION** will meet September 27 at the Elks Club. Programs of both meetings may be obtained from Harold Swanberg, M.D., Secretary, M.A.M. Society and A.M.W. Association, 209 224 W.C.U. Bldg., Quincy, Ill.

RESEARCH FELLOWSHIPS IN MEDICINE. American College of Physicians announces that a limited number of fellowships will be available from July 1, 1951—June 30, 1952. Application forms will be supplied on request to the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pa., and must be submitted in duplicate not later than October 1, 1950.

FIFTH POSTGRADUATE CIRCUIT NOW IN PROGRESS

Robert M. Becker, M.D., opened his fifth circuit of lectures on Internal Medicine July 3. The teaching centers are: Watonga, Monday nights, Enid, Tuesday nights, Alva, Wednesday nights, Guymon, Thursday nights and Woodward, Friday nights. The lectures are being well attended in spite of the heat and summer vacations. This circuit will close September 8.

On September 11 the sixth circuit will open in the following centers: Oklahoma City, Norman, Pauls Valley, Shawnee and Wewoka. It is urged that the physicians in this area mail their enrollments to the Postgraduate Committee immediately upon receipt of the announcement letter. If this is done it will not be necessary for a representative from the State Office to call on each physician. Doctor Becker's lectures have been well received over the state and the percentage of attendance has been high.

The Postgraduate Committee is now attempting to obtain an instructor for a two-year course in "Psychosomatic and Psychoneurotic Medicine" to follow immediately the present one which will close in the state June 30, 1951. This subject has been requested by the majority of the physicians attending the lectures and it is hoped, by the Committee, that a competent man can be found to present this phase of medicine to the doctors over the state.

CANCER SYMPOSIUM TO FEATURE GYNECOLOGICAL MALIGNANCIES

Three nationally known lecturers will conduct the cancer symposium on gynecological malignancies to be sponsored by the Oklahoma State Medical Association and the Oklahoma State Department of Health, according to Gregory E. Stanbro, M.D., Chairman, Professional Education Committee of the American Cancer Society, Oklahoma Division.

Schedule for the symposium is as follows:

	<i>West Side</i>	<i>East Side</i>
Monday, September 25	Lawton	Ada
Tuesday, September 26	Oklahoma City	Durant
Wednesday, September 27	Clinton	McAlester
Thursday, September 28	Woodward	Muskogee
Friday, September 29	Enid	Tulsa

Those who attended the symposium last year will be looking forward to an equally fine program and those who did not should plan to attend the one nearest their home.

\$100,000,000 PAID BY BLUE CROSS PLAN

Nearly a hundred million dollars, representing more than 88 per cent of income, was paid to hospitals by the voluntary, non-profit Blue Cross Plans for care of members during the first quarter of 1950, Richard M. Jones, Chicago, director, Blue Cross Commission of the American Hospital Association, said recently.

From a total income of \$109,801,301, the 90 Blue Cross Plans of the United States and Canada paid \$96,989,972 for member's care and used only \$9,184,564 (8.37 per cent) for operating expenses.

There are more than 38,000,000 persons enrolled in the Blue Cross Plans in the United States and Canada, representing more than 24 per cent of the United States population and 21 per cent of the Canadian people.

	Calories	Protein Gm.	Calcium Gm.	Copper mg.	Iron mg.	Phosphorus Gm.	Vitamin A I. U.	Thiamine mg.	Riboflavin mg.	Niacin mg.	Ascorbic Acid mg.	Vitamin D I. U.
National Research Council Allowances, Sedentary Man (154 lbs.)	2,400	70	1.0	1.2	12	1.5	5,000	1.2	1.8	12	75	Small Amount
Ovaltine in Milk, 3 Servings*	676	32	1.12	0.5	12	0.94	3,000	1.16	2.0	6.8	30	417
Percentages of N. R. C. Allowances Provided by 3 Servings* of Ovaltine in Milk	28%	46%	112%	42%	100%	63%	60%	97%	111%	57%	40%	Abun- dance

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OBITUARIES

CARL L. BRUNDAGE, M.D. 1895-1950

Carl L. Brundage, M.D., prominent Oklahoma City dermatologist, died June 2 several hours after he had suffered a cerebral hemorrhage.

Doctor Brundage was born in 1895 at Thomas, Oklahoma and was graduated from highschool there in 1914. He received a B.S. degree from the University of Oklahoma in 1918 and his M.D. degree from there in 1922. He was graduated from the University of Pennsylvania in 1928 with a M.S. degree.

Clinical professor of dermatology and syphilology at the University of Oklahoma School of Medicine, he came to Oklahoma City in 1928. Prior to that time, Doctor Brundage practiced in Thomas.

Survivors include his widow, one stepson, Ted Beville, three sisters, Mrs. Dean Hook, Thomas, Mrs. Ben Komms and Mrs. George Logsdon, both of Taloga, and two brothers, Frank Brundage and Bert H. Brundage, M.D., both of Thomas.

W. R. JOBLIN, M.D. 1873-1950

Walter R. Joblin, M.D., 77, pioneer eastern Oklahoma physician, died June 3 in a Muskogee hospital following a cerebral hemorrhage.

Doctor Joblin, who had practiced in Porter for 45 years, was born in Batesville, Arkansas, February 6, 1873. He was graduated from Washington University, St. Louis, in 1896. He practiced in Newport and Mountain Home, Arkansas before coming to Porter.

Doctor Joblin's activities included director of public health for 16 years, member of the school board 22 years, surgeon for MKT railway 30 years, Past President of the Muskogee Sequoyah-Wagoner County Medical Society, member of the staff of Oklahoma Baptist Hospital, Muskogee, and Masonic order of Knights Templar and Shrine. Doctor Joblin was a Life Member of the Oklahoma State Medical Association and had been presented a 50 Year Pin.

ABNER MACKEY, M.D. 1915-1950

Abner Mackey, M.D., 34, was killed June 29 in an automobile accident near Garden City, Texas.

Doctor Mackey, a resident physician at Bone and Joint Hospital Oklahoma City until two days before his death, was a specialist in orthopedic surgery. He was en route to Midland, Texas where he was to be associated with the hospital.

Doctor Mackey was reared at Okemah and was a graduate of the University of Oklahoma Medical School. He interned at Hamot Hospital, Erie, Pa., and practiced a year in Arkansas, and then served as a medical captain with the Second armored division in Germany.

JAMES L. MINER, M.D. 1881-1950

James L. Miner, M.D., 63, longtime Tulsa physician, died June 4 in a Tulsa hospital following a long illness.

Doctor Miner had practiced in Tulsa for 23 years. He formerly resided in Beggs and Big Heart.

A native of St. Johnsbury, Vt., Doctor Miner received his medical training at the University of Vermont, Burlington, at New York City Medical Institute and at the Lying-In Hospital in Philadelphia. He served his internship at a Burlington hospital. He moved to Oklahoma in 1912.

Doctor Miner had been in ill health for about two years and retired in October, 1949. He had been active in the Masonic lodge, the First Methodist Church, several medical organizations and The Tulsans, a men's glee club.

Surviving are the widow and one son, Vernen L., both of the home.

JAMES E. ARRINGTON, M.D. 1878-1950

James E. Arrington, M.D., well known Tillman county physician, died June 11 following an illness of several months.

Doctor Arrington was born January 11, 1878, and was graduated from the University of Tennessee Medical School in 1905 and first began the practice of medicine in Indianola. He returned later to the University of Tennessee for postgraduate work and moved to Frederick to practice in 1915.

Doctor Arrington was a lifelong member of the Christian Church, a Scottish Rite Mason and member of the Fraternal Woodmen of the World, a charter member of the Lions Club of Frederick, and a past president of the Tillman County Medical Society.

Survivors include the widow and one son, Jerry E. Arrington, M.D., of Columbus, Ohio. Three grandchildren and six half brothers also survive.

H. E. THURSTON, M.D. 1871-1950

H. E. Thurston, M.D., who practiced medicine in Texhoma for 35 years until his retirement in February, 1948, died June 22 in a Wichita, Kansas hospital.

Born at Washington Cornthorpe, Ohio, November 23, 1871, he was graduated from the School of Medicine at the University of Indiana in 1898. He came to Oklahoma in 1905 locating first at Woodville, then at Meridian. He came to Texhoma in 1913. He was active in civic and medical organizations and had been a member of the Presbyterian Church since childhood.

Doctor Thurston is survived by two sons, David K. and James Elmer, and two sisters.



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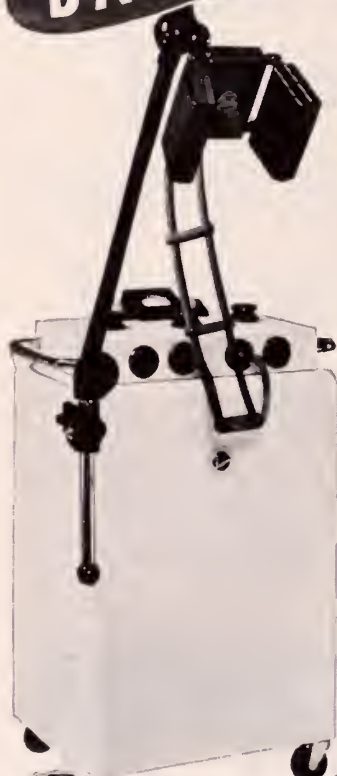
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RESOLUTION

A RESOLUTION EXPRESSING THE APPRECIATION OF THE BOARD OF CITY COMMISSIONERS OF PAULS VALLEY, OKLAHOMA, FOR THE LONG, FAITHFUL AND EFFICIENT SERVICE RENDERED BY DOCTOR JOHN R. CALLAWAY AS CITY PHYSICIAN AND HEALTH OFFICER.

WHEREAS, John R. Callaway, M.D., City of Pauls Valley, Oklahoma, has served the said city as City Physician and Health Officer continuously since the year of about 1926, and has been a resident and practicing physician of Garvin County, Oklahoma, since about the year 1900, except for his absence in the services of the United States Government, where he was on duty as physician for various Indian tribes located in New Mexico, and,

WHEREAS, Doctor Callaway has during said time rendered faithful, valuable and unselfish service to said city and to the citizens of Garvin County and to the Government of the United States of America, and has been most faithful, courageous and efficient in his devotion to such duties and services to the City of Pauls Valley, and,

WHEREAS, the Board of City Commissioners of the City of Pauls Valley, desires to express their sincere appreciation for the long, valuable and faithful services rendered by Doctor Callaway to the city and its citizens for a period of a half a century,

BOARD OF CITY COMMISSIONERS OF PAULS VALLEY, OKLAHOMA:

The the Board of City Commissioners of said city does hereby express their sincere appreciation to Doctor John R. Callaway for his many years of faithful, efficient and unselfish services rendered to the City of Pauls Valley and his fellow citizens

That the City Secretary is directed to furnish a copy of this resolution to Doctor John R. Callaway and to the State Medical Association, State of Oklahoma, and to the Medical Association of Garvin County, Oklahoma.

s/ W. J. Harris,

City Secretary.

ATTEST:

s/ JACK LIVINGSTON,
Mayor.

BOOKLET AVAILABLE

"Control of Communicable Diseases in Man," seventh edition published by the American Public Health Association is now available to any physician in the State who addresses a request to the State Department of Health, 3400 North Eastern, Oklahoma City. At the last meeting of the State Board of Health, it was decided to furnish the booklet free of charge to all physicians requesting it.

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HAVE YOU HEARD?

W. K. Haynie, M.D., Durant, was made a lifetime honorary member of the state 4-H Club organization and is the only physician to ever receive the honor.

Edward A. Jones, M.D., Wagoner, was guest speaker on appendicitis at a recent meeting of the Wagoner Lions Club.

E. L. Buford, M.D., Guymon, recently took a course in abdominal surgery at Hamot Hospital, Erie, Pennsylvania and at the Peter Bent Brigham Hospital in Boston.

E. T. Cook, Jr., Anadarko, discussed recent technical medical discoveries at an Anadarko Kiwanis Club meeting.

T. C. Leachman, M.D., formerly of Woodward, has retired and moved to Richmond, Va., after 53 years in the practice of medicine.

W. Albert Cook, M.D., Tulsa, visited at Lake Tahoe, Seattle, Los Angeles, San Diego, Coronado and Oakland while on the west coast after attending the A.M.A. in San Francisco.

E. W. King, M.D., Bristow, attended an alumni class reunion at Louisville, Kentucky in June.

A. B. Colyar, M.D., McAlester, is leaving in August where he will enter Johns Hopkins University.

H. Violet Sturgeon, M.D., Hennessey, joined the post convention air tour to the Hawaiian Islands following the A.M.A. in San Francisco.

M. L. Whitney, M.D., Okemah, has been elected president of the Okfuskee County Hospital medical staff.

J. B. Hollis, M.D., Mangum, headed the recent booster trip committee for the Mangum rodeo.

T. H. McCarley, M.D., McAlester, attended the A.M.A. and visited his son who is a resident at Stanford University Hospital in Palo Alto, Calif.

Emil Palik, M.D., Tulsa, has been elected to the executive committee of the Oklahoma Division, American Cancer Society.

L. V. Baker, M.D., Elk City, has been appointed to the state Pardon and Parole Board by Gov. Roy J. Turner.

Floyd Waters, M.D., has been elected president of the Hugo Lions Club.

O. S. Somerville, M.D., Bartlesville, has been presented a certificate and pin recognizing his 50 years as a Mason by the Oklahoma Grand Master, Harold P. Cook.

James F. Hohl, M.D., Norman, left July 1 for the Lahey Clinic, Boston, where he has accepted a two year fellowship in internal medicine. He was granted a leave of absence from the Student Health Service at Oklahoma University.

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BOOK REVIEWS

A PRIMER FOR DIABETIC PATIENTS. (Revised 9th Edition), Russell M. Wilder, M.D., Ph.D., F.A.C.P., The Mayo Clinic, Rochester, Minnesota—200 Pages, Illustrated, W. B. Saunders Company—Price \$2.25.

Viewed from the standpoint of the "semi-layman," (a wholly unofficial, self imposed title, based on the oft repeated assertion that after thorough study of his disease, the diabetic will "know it as well as the physician"), unversed in the somewhat frightening, though impressive, Latin "lingo" of the majority of informative medical dissertations, the Primer For Diabetic Patients offers a practical and straightforward explanation of the disease, its requirements and the precautions which must necessarily accompany its effective control.

The author displays a comforting cognizance of the "human element," especially manifested in that portion of the publication devoted to diet and food substitutions. To a greater extent than has been noted in various other books on the subject, the writer has transposed the mighty gram into the common household measure, and offered logical substitutions in the daily diet, refraining admirably from making constant reference to the huge amounts of cabbage which could be consumed in lieu of this or that more toothsome delicacy. (One becomes a bit weary of raw cabbage!)

A thorough discussion of the possible complications of diabetes, with special emphasis on the care of the pedal extremities, is given in proverbial "one-syllable" form, and should be called to the patient's attention as being of the utmost importance.

Perhaps one of the most desirable and useful items incorporated into this book is the series of questions for the patient, which follows each chapter. It is believed that it might behoove the physician to suggest that the patient answer these questions on a separate sheet of paper, so that, at intervals throughout his "long, clean and happy" existence, he may reaffirm his retention of the knowledge of the disease and its treatment, which will always be so vital to him.—June Marchant.

ELECTROCARDIOGRAPHY—Fundamentals and Clinical Application. Louis Wolff, M.D. Visiting Physician, Consultant in Cardiology and Chief of the Electrocardiographic Laboratory, Beth Israel Hospital, Associate in Medicine Harvard Medical School, Philadelphia, W. B. Saunders Company, 187 pages, 1950.

This is a concise, well written monograph on the fundamentals of electrocardiography and their clinical application. The author, in teaching electrocardiography, abandoned older methods based on interpretation of electrocardiographic patterns and replaced them with those based on principles of electrocardiography. This resulted in a better understanding of the subject among his students. The plan of presentation used in the classroom is followed in this volume. The author's aim is to teach the reader these principles so that he will "come to realize that 'unipolar' leads or multiple precordial leads are neither mysterious nor confusing."

Discussions of fundamentals are contained on part one. These deal with electrical phenomena associated with muscle contraction and the various electrical effects responsible for production of the electrocardiogram and their application in bundle branch block, ventri-

cular hypertrophy and muscle injury. The second part of the book is concerned with the interpretation of the electrocardiogram from the viewpoint previously described. There are tables, diagrams and numerous reproductions of tracings representing various abnormalities in the form of the electrocardiogram. Arrhythmias are not included.

The chapters are short and the material contained therein is expressed in the simplest terms possible. No attempt is made to cover every aspect of the subject but most of the essentials are presented. This text will prove profitable reading for all who are interested in electrocardiography and especially valuable to the practicing physician who cannot devote a great deal of time to study in this particular field.—George N. Barry, M.D.

A MANUAL OF CARDIOLOGY. Thomas J. Dry, Second Edition, Philadelphia, W. B. Saunders Company, 1950.

This manual represents a very concise and brief presentation of heart disease. It appears that it would be an excellent quick reference for desk use in the busy practitioner's office and would also serve as a quick review for those interested in cardiology.

Unfortunately, older terminology is mixed with newer terminology of cardiology, and particularly, as related to electrocardiography. Frequently, one EKG on the first day is recorded with CR leads and on the following day, V leads are presented. This leads to considerable confusion in interpretation and comparison.

—W. T. McCollum, M.D.

THE ETHICAL BASIS OF MEDICAL PRACTICE.

Willard L. Sperry, Dean of Harvard Divinity School with a foreword by J. Howard Meaus, M.D. 185 pages, New York, Paul B. Hoeber, Inc., Medical book department of Harper & Brothers, 1950. Price \$2.50.

In this difficult era when the world is so in need of an equable blend of sense, science and sentiment, everybody interested in medicine should read this important discussion of vital human issues.

Can anything be more important than the problems confronting present day patients, physicians and priests? The time has come when these three must get together in behalf of both body and soul. A careful perusal of this remarkable discourse should help restore the patient-physician relationship and preserve it for posterity.

To name the chapters should be sufficient recommendation for medical readers—Our Overlapping Professions, The Specialist and the General Practitioner, The Nature of Conscience, Dr. Richard Cabot and "Lord Jim," The Profession in General, Codes of Medical Ethics, Our Tragic Moral Choices, Democratic vs. Totalitarian Medicine, Telling the Truth to the Patient, The Prolongation of Life, Euthanasia Pro, Euthanasia Con, Reverence for Life, Second Thoughts.

Every teacher of medicine should carefully study the author's philosophy of morals and ethics; every medical student and every practicing physician should read the book and give careful consideration to its contents in the light of present trends. It may help physicians to realize that they are bound by the verities of human nature and that they must never lose sight of the patient whose sense of need has not been materially affected by scientific progress.—Lewis J. Moorman, M.D.



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MEDICAL ABSTRACTS

ROBERT M. BECKER, M.D.

INTRAVENOUS ADMINISTRATION OF TETRACAINE (PONTOCAINE) HCl: PRELIMINARY REPORT. Horan, J. S. (Dept. Psych. & Neurol., Univ. of Tenn. Col. of Med., Memphis, Tenn.) Arch. Int. Med. 85:972, June, 1950.

The author reports his experience with the use of intravenous tetracaine in conditions previously reported favorably affected by intravenous procaine, conditions such as arthritis, low back pain, neuritis, asthma, generalized pruritis, etc. Altogether, he treated 104 patients with these various conditions and reports that 98 of them (94 per cent) "experienced definite improvement," using an optimal dose of 10 cc of a 0.25 per cent solution of tetracaine HCl given slowly intravenously over a period of five minutes. He prepared the solution by adding the contents of a 250 mgm ampul of tetracaine crystals to 100 cc of isotonic saline solution, which was kept in a rubber-stopped bottle from which small amounts were withdrawn as needed. He also recommends use of a 25 gauge needle to facilitate giving it slowly. One hundred and four patients received a total of 204 intravenous injections. One patient fainted and one had slight nausea and vomiting, others complained of transient dizziness; otherwise no significant deleterious effects were noted. He feels it is therapeutically superior to intravenous procaine and easier to administer.

SIMULTANEOUS IMMUNIZATION OF NEW BORN INFANTS AGAINST DIPHTHERIA, TETANUS AND PERTUSSIS. di Saint Agnese, Paul A. (Dept. Pediatrics, Columbia Univ. N. Y., N. Y.) Am. Jour. Public Health 40:674, June, 1950.

In a clinical study, the author has attempted to throw some light on the debatable question of how early should immunization schedules be started in infants and cites reports pro and con regarding the ability of very young infants to develop antibodies. He followed antibody titres in the blood of new born and older infants, after giving them 0.5 1.0 cc doses of standard triple vaccine. From his results, he concludes that "the capacity to produce antibodies in response to an antigenic stimulus increases with advancing age" in children. He further suggests "that until further work is done routine prophylactic inoculations not be started before the age of three months," because of the inability of infants younger than three months to develop adequate protective antibodies.—Robert M. Becker, M.D.

SURGICAL TREATMENT OF CHRONIC NONSPECIFIC ULCERATIVE COLITIS—RESULTS IN 106 CASES. Brown, C. H., Gleckler, W. J. and Jones, T. E.—Address—Cleveland Clinic and F. E. Bunts Educ. Inst. Gastroenterology 14:465, April, 1950.

Reporting their experiences with surgical treatment of chronic ulcerative colitis in 106 patients followed for a period of about three and one-half to six and one-half years, the authors conclude that surgery is indicated in this disease only for: (1) severe local complications (rectal strictures, fistulae, polyposis, carcinoma), (2) severe systemic complications (arthritis, erythema nodosum) and (3) severe intractable forms of the disease which make the patient a chronic invalid. They report sixty excellent results of the 106 patients treated surgically, 10 additional receiving a satisfactory result. They strongly recommend withholding surgery during the acute toxic exacerbation of the disease, finding a 23 per cent surgical mortality at this time versus a

0 per cent mortality when surgery was done at a more quiescent interval. They also recommend ileostomy followed by total colectomy within a two to six month period, pointing out that ileostomy by itself has little effect on the disease process in the colon. Also in a separate article in the same issue of Gastroenterol. Glecker and Brown report an incidence of 3.8 per cent of carcinoma of the colon in these patients with chronic ulcerative colitis; a higher incidence than found in the general population and found in ulcerative colitis patients that colon carcinoma appears earlier in life than in the general population.—Robert M. Becker, M.D.

SIMULTANEOUS IMMUNIZATION OF YOUNG CHILDREN AGAINST DIPHTHERIA, TETANUS AND PERTUSSIS. Sauer, L. W. and Tucker, W. H. (Dept. Pediatrics, Northwestern Univ. Med. School, Chicago, Ill.) Am. J. Public Health 40:681, June, 1950.

The authors point out that "most attempts at early immunization of infants have met with difficulties of one kind or another" and cite an impressive list of reports of failure to produce satisfactory immune states in infants during the first month or two of life. From their present studies they found that (1) alternate lateral gluteal areas were the most favorable sites for the intramuscular administration of the alum-precipitated multiple antigen preparations, (2) "Three monthly doses of an alum-precipitated mixture of diphtheria toxoid and pertussis vaccine administered at four, five, and six months conferred adequate protection against diphtheria to 97 per cent, but in only 65 per cent against pertussis," (3) "An alum-precipitated mixture of diphtheria and tetanus toxoids with pertussis vaccine administered to infants in three monthly doses after the age of six months conferred immunity against diphtheria in 100 per cent, against tetanus in 86 per cent and against pertussis in 83 per cent," (4) An alum-precipitated mixture of diphtheria and tetanus toxoids with pertussis vaccine administered to infants in four monthly doses at the age of three, four, five, and six months conferred protection against diphtheria to 86 per cent, to tetanus in 100 per cent and to pertussis in 98 per cent.—Robert M. Becker, M.D.

SUDDEN DEATH DUE TO ALLERGY TESTS. Harris, M. C., and Shure, V. (College of Med. Evang. School of Medicine, Los Angeles, Calif.) Jour. of Allergy 21:208, May, 1950.

The case of a 25 year old woman who expired in a state of anaphylactic shock ten minutes after receiving intradermal skin testing injections is reported. Despite immediate tourniquet application and injections of adrenalin and aminophyllin, nasal oxygen and tracheotomy with direct tracheal oxygen the patient expired. Autopsy revealed marked hypertrophy of bronchial musculature, pulmonary emphysema and dilatation of the right side of the heart with congestion and dilatation of the systemic venous circuit. Characteristic of anaphylactic shock, the blood at post mortem was found to be incapable of clotting. By passive transfer tests, injecting the patients serum intradermally into non-allergic control individuals, high antibody titres to cottonseed were found and since this allergen was one of those used in skin testing the patient, it was felt that this was the death precipitating antigen. The authors advocate preliminary skin testing by the less sensitive scratch method first before intradermal skin testing.

AUREOMYCIN

CRYSTALLINE

in Infections of the Puerperium

During the past year, obstetricians have become increasingly impressed with the ability of aureomycin to prevent or arrest infections of the puerperium. Where infection is feared, or has appeared, this broadly effective antibiotic is highly useful. Drug fastness and allergy are very rare following aureomycin. It is believed that this new crystalline form of aureomycin obviates nearly all side reactions.



Aureomycin

Capsules:

Bottles of 25, 50 mg. each capsule.
Bottles of 16, 250 mg. each capsule.

Ophthalmic:

Vials of 25 mg. with dropper,
solution prepared by adding
5 cc. of distilled water.

Aureomycin has also been found effective for the control of the following infections:

Acute amebiasis, bacterial infections associated with virus influenza, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, brucellosis, chancroid, Friedländer infections (*Klebsiella pneumonia*), gonorrhea (resistant), Gram-negative infections (including those caused by some of the coli-aerogenes group), Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, peritonitis, pertussis infections (acute and subacute), primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, sinusitis, subacute bacterial endocarditis resistant to penicillin, surgical infections, tick-bite fever (African), tularemia, typhus and the common infections of the uterus and adnexa.

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For SALE: 110 volt x-ray generator, tube and control. \$125.00. Write Key E, care of the Journal.

FOR SALE: I am retiring after 50 years of activity in surgery and general practice and desire a successor eligible to medical society membership. Office equipment with x-ray, diathermy and excellent laboratory facilities. Full time nurse-technician employed. Rent reasonable. College town of 25,000 population. Modern standardized hospital and admission to staff easily arranged. A splendid nucleus for a clinic if desired. Terms made agreeable and will remain for introduction. Write Key B, care of the Journal.

FOR SALE: X-ray 25 MA. Profex with upright fluoroscope, cassettes, and darkroom equipment. Used one year. \$1100. Write Key L, care of the Journal.

FOR SALE. At reasonable price, office equipment of well established physician, recently deceased. Write Key F, care of the Journal.

FOR SALE: Oklahoma City outlying district extensive lucrative practice. Good hospital connection. Five room living quarters. Eight room clinic. Also three room ambulatory hospital in connection. Fully equipped for all clinical diagnosis. Sudden coronary — act now while established clientele is still available. Write Key C, care of the Journal.

FOR SALE: Complete set of equipment for General Practice, x ray, diathermy, waiting room furniture. Top shape. Write Key P, care of the Journal.

FOR SALE. 1 Super Site floor model magnifying light. 1 Sklar tonsil machine cabinet model. Never used. 1 water cooled ultra violet ray treatment lamp with quartz applicator. 1 Spencer Buffalo microscope. Write Key A, care of the Journal.

FOR SALE. As I am retiring I have a corner brick 80 feet equipped for doctor's office. Good office supplies and equipment. Living quarters in rear. Can be arranged for small hospital. Good friendly people to work with. Lions Club will sponsor. Write Key D, care of the Journal.

FOR RENT OR SALE. Newly equipped four-room office, lucrative practice in Oklahoma town of 2000 population, large trade area, one osteopath, no M.D., licensed pharmacist. Possible large home. Write Key G, care of the Journal.

TO LEASE: Am retiring. Want to turn over my practice. Office in home. All furnished as it is including library and office equipment. Write Key H, care of the Journal.

FOR SALE: Dictaphone. Dictating electronic model A.E. and transcribing machine CB. Practically new. Will sell at great sacrifice. Write Key M, care of the Journal.

PHYSICIAN WANTED: Unusual opportunity for young general practitioner in southern Oklahoma oilfield community. Write Key Z, care of the Journal.

FOR SALE: Office equipment including new examining table, instrument cabinet, treatment cabinet, treatment chair, infra-red lamp, small sterilizer, library, electric refrigerator, Victor Table Type X-Ray, other pieces of equipment. Will sell at sacrifice. Town of 3,500 needs physician. Office space available in air conditioned building, \$22.50 per month. Write Key Y, care of the Journal.

FOR SALE: As I am retiring I want to dispense of my office, including x-ray and other good equipment. Excellent town, 7,500. Ready for a good clinic. Best opportunity in state for one or two competent men. Write Key K, care of the Journal.

MEDICAL SOCIETIES AROUND THE STATE

Northwest Counties

Members of the Northwest Counties Medical Society met June 15 at Beaver at the home of the President, Edward A. McGrew, M.D. Twenty of the 25 members and their wives and five visiting physicians were present.

Verne Pauley, M.D., Wichita, Kansas, a classmate of Doctor McGrew's presented an interesting and instructive illustrated lecture on urology. Next meeting of the society will be held at the Newman Clinic at Shattuck in October.

Pottawatomie County

Members of the Pottawatomie County Medical Society are serving as members of a disaster committee recently set up in that county. Paul Gallaher, M.D., has been named chief with Jack Baxter, M.D., John Carson, M.D., and K. W. Navin, M.D., as his assistants.

Atoka, Bryan, Coal, Johnston

Members of the Atoka, Bryan, Coal and Johnston Counties Medical Society voted at a recent meeting to

extend invitations for membership in their organization to dentists and pharmacists in the four county area.

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OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES

OKLAHOMA STATE MEDICAL ASSOCIATION

June 4, 1950

Oklahoma City, Oklahoma

MINUTES OF THE FIRST SESSION

The first session of the House of Delegates of the Oklahoma State Medical Association was called to order by the Speaker of the House, L. Chester McHenry, M.D., Oklahoma City, on Sunday, June 4th, 1950, at 2:00 P. M. in the Mirror Room of the Municipal Auditorium, Oklahoma City, Oklahoma.

The Speaker called upon A. R. Sugg, M.D., Ada, Chairman of the Credentials Committee, for a report. Doctor Sugg reported that he and the members of the Committee had marked the Delegates and representative Alternates present and that there was a quorum present.

The reading of the minutes of the last meeting of the House of Delegates was called for, and the following motion was made after the statement by the Speaker that the minutes had been published in the Journal immediately following the meeting. It was *moved* by McLain Rogers, M.D., Clinton, *seconded* by Malcom Phelps, M.D., El Reno, that the minutes be accepted as published. The motion *carried*.

The Speaker announced that the following delegates were appointed to the Reference Committees:

1. Constitution and By-Laws Committee — W. T. Gill, M.D., Ada, Chairman; S. P. Harrison, M.D., Oklahoma City; V. K. Allen, M.D., Tulsa.
2. Resolutions Committee — Ralph A. Smith, M.D., Oklahoma City, Chairman; James Stevenson, M.D., Tulsa; E. H. Shuller, M.D., McAlester.
3. Tellers — Bill Simon, M.D., Perry; I. F. Stephenson, M.D., Alva; W. W. Cotton, M.D., Poteau.
4. Sargeants-at-Arms — C. M. Hodgson, M.D., Kingfisher; Powell Fry, M.D., Stillwater.

The next item of business before the House was the nomination of officers of the Association. The Speaker stated that the By-Laws of the Association as stated in Chapter V, Section 2, call for nomination in the first session, with election (Chapter V, Section 3) to be held at the second session of the House of Delegates. The Speaker announced the time of election to be at 8:00 or as near thereafter as possible, in the evening at the second session. The officers to be elected included: President-Elect, Vice President, Delegate to the American Medical Association, Alternate Delegate to the American Medical Association, Speaker of the House, Vice Speaker of the House. Also Councilors and Vice-Councilors from Districts 1, 4, 7, 10 and 13 were to be elected. The Speaker stated that O. C. Standifer, M.D., Elk City, Councilor of District 5, had resigned, making it necessary to elect a Councilor from that District.

The Speaker declared the House of Delegates open for nominations for President Elect and requested the Vice Speaker, A. R. Sugg, M.D., Ada, to preside. Bruce Hinson, M.D., Enid, *nominated* L. Chester McHenry, M.D., Oklahoma City, as candidate for President-Elect of the Oklahoma State Medical Association. The nomination was *seconded* by John Matt, M.D., Tulsa. A motion was then made by Ned Burleson, M.D., Prague, *seconded* by Forrest Etter, M.D., Bartlesville, that nominations close. The motion *carried* unanimously. Following the nomination of Doctor McHenry, the Speaker resumed the Chair.

The Speaker then called for nominations for Vice-President. V. K. Allen, M.D., Tulsa, *nominated* Malcom Phelps, M.D., El Reno, as Vice-President. It was

moved by Ned Burleson, M.D., Prague, *seconded* by McLain Rogers, M.D., Clinton, that nominations close. The motion *carried* unanimously.

Nominations were declared open by the Speaker for Speaker of the House of Delegates. Shade D. Neely, M.D., Muskogee, *nominated* Maurice J. Searle, M.D., Tulsa, as Speaker of the House. William T. Gill, M.D., Ada, *nominated* A. R. Sugg, M.D., of Ada. It was *moved* by Ned Burleson, M.D., Prague, *seconded* by I. W. Bollinger, M.D., Henryetta, that nominations close. The motion *carried* unanimously.

The Speaker called for nominations for Vice-Speaker of the House of Delegates. W. W. Cotton, M.D., Poteau, *nominated* W. K. Haynie, M.D., Durant. It was *moved* by Bruce Hinson, M.D., *seconded* by Maurice Searle, M.D., that nominations close. Motion *carried* unanimously.

Nominations were declared open by the Speaker for Delegate to the American Medical Association. Maurice J. Searle, M.D., Tulsa, *nominated* James S. Stevenson, M.D., Tulsa, to again be Delegate to the A. M. A. It was *moved* by Malcom Phelps, M.D., El Reno, *seconded* by V. K. Allen, M.D., that nominations close. Motion *carried* unanimously.

The Speaker called for nominations for Alternate Delegate to the American Medical Association. F. R. First, Jr., M.D., *nominated* Finis W. Ewing, M.D., Muskogee, as Alternate Delegate to the A. M. A. It was *moved* by John Matt, M.D., Tulsa, and duly *seconded* that nominations close. The motion *carried* unanimously.

The Speaker stated that in order that the Councilor Districts might caucus the nominations for Councilors and Vice-Councilors would be delayed until the evening session.

Following the nomination of officers, the Speaker called upon the Officers of the Association for Reports of the past year's activities. The Speaker stated that reports had been published in the Journal from Councilor Districts 1, 3, 5, 7, 8, 9, 10, 11, 12 and 14. The Public Policy Report, Committee on Medical Education and Hospitals Report, Medical Advisory Committee to the Vocational Rehabilitation Division Report, Crippled Children's Committee Report, Veterans Care Committee Report, Report of the Committee on Post Graduate Medical Teaching, Report of the Committee on Rural Health, Report of the Committee on Necrology, Report of Committee for the Conservation of Health, and the Secretary-Treasurer's Report had also been published. The following motion was made by Carl T. Steen, M.D., Pauls Valley: "I *move* that the reports published in the Journal be accepted as printed." Motion *seconded* by I. W. Bollinger, M.D., Henryetta, and *carried*.

The Speaker called for reports of Councilors which were not printed in the Journal. L. A. Mitchell, M.D., Councilor from District 2 was not present and Doctor J. W. Francis, Perry, Vice Councilor, stated that a report had been prepared to send to the Executive Office.

D. B. Ensor, M.D., Hopeton, Councilor from the Fourth District, read his annual report. W. S. Larrabee, M.D., Tulsa, *moved* the report be accepted as read. The motion was *seconded* by Ned Burleson, M.D., Prague. Motion *carried*.

In the absence of Doctor R. Q. Goodwin, Oklahoma City, and Doctor W. W. Rucks, Jr., Councilor and Vice-Councilor respectively from the Sixth District, Doctor McHenry read the report of that Councilor District. M. J. Searle, M.D., Tulsa, *moved* that the report be accepted as read. The motion was *seconded* by I. W. Bolinger, M.D., Henryetta. Motion *carried*.

J. L. Patterson, M.D., Councilor from District 13, reported there was no report from the 13th District.

It was *moved* by Ned Burleson, M.D., Prague, that the report of the Secretary-Treasurer be accepted as published in the June Journal. The motion was *seconded* by George L. Kaiser, M.D., Muskogee. Motion *carried*.

The Speaker asked for the report of the Delegates to the American Medical Association. Doctor James Stevenson, Tulsa, was recognized and spoke briefly concerning the activities of the A. M. A. as it pertained to their programs in the educational fields of scientific medicine, economics, and socio-political problems as they affected the people of the United States.

The Speaker next called upon George H. Garrison, M.D., President, for the report of the Council which was as follows:

COUNCIL REPORT

The Council's report to this House of Delegates will again point out its stewardship for the past year with certain recommendations for the year to come. Your Council feels that it must repeat itself in pointing out to the delegates that they alone govern the policies and programs of the Association and it is their solemn duty to report the action of this session of the House of Delegates to their County Societies.

1950-51 will be an election year. There will be new legislative bodies at both the state and national levels. It is imperative that the individual physician take an active part in assisting in sending the best possible candidates to these governing bodies. In addition to the consideration of the problems of government there continues to be many other problems in the fields of economic and social planning still facing the profession such as emergency medical care for national defense, medical education, hospital construction, public health, extension of voluntary health insurance to the people and a continuation of the high standards and availability of medical care for all the people. While all of these problems merit the greatest consideration on the part of the physician and this Association there is one aspect of public relations which transcends all others; this specifically being the daily relationship of the physician with his patient.

Your Council makes the following report on its stewardship and recommendations for the coming year.

MEMBERSHIP

The membership of the Association as of May 18, 1950, was 1305. The Association has 47 Honorary members, 16 Life Members, eight Associate members and 14 Junior and Service members. There are three Honorary and thirty-six Life memberships to be acted upon at this session of the House of Delegates. As long ago as 1948 this House of Delegates has urged that the County and District Societies appoint membership committees to bring all eligible physicians in the jurisdiction of the Societies into its membership. On the whole your Council has been disappointed in the result of this recommendation and again urges that the Societies take such action and that these committees function. Many young physicians are reluctant to force their way and seek membership. The initiative should be on the part of the County or District Society.

FINANCES AND BUDGET

Financing of the Association and its activities must be given careful consideration by this House of Delegates. Your Council, in submitting its recommendations concerning the budget and dues for 1951 calls to your attention that the financial condition of this Association is not strong and that improvement cannot be made on the basis of present income and expenditure.

Your Council again calls to your attention that the House of Delegates sets the dues for membership and outlines the activities of the Association. Your council, after considering the needs of the Association to combat government interference and domination in medicine for the people, to carry on the general work of the Association, increase its participation in Postgraduate Education, recommends that the dues for 1951 remain at \$42.00.

Your Council is not unmindful that coming before this House of Delegates will be recommendations that membership in the American Medical Association be mandatory for membership in the Oklahoma State Medical Association which will require A. M. A. dues of \$25.00 but your Council would point out that this money will be used by the A. M. A. for its activities and will in no way be of local assistance to any of the State Associations. It is also interesting to note that two other state associations have already taken this action, these being Mississippi and Nebraska.

The Association's cash on hand January 1, 1950, was in the amount of \$17,337.53 with the Public Policy Committee having a cash balance of \$21,559.01 and with no provision in the budget for an appropriation to the Public Policy Committee. Anticipated revenue over income for 1950 is \$10,942.50 and while these amounts on the surface would seem to show the financial condition of the Association in a favorable light your attention is directed to the budget of the Public Policy Committee of \$18,015.15 which sum will have to be made available in 1951 out of general revenue funds. Your Council would also point out that no provision has been made in the budget for legal service other than that of a routine nature. At the present time bonds held by the Association are in the amount of \$12,000.00 and your Council recommends that \$5,000.00 of the Association cash funds be placed in the reserve funds of the Association in the form of government bonds.

In compliance with Article IX, Section 2, of the Constitution, the Council submits the following budget for the year 1951. As has been pointed out in each preceding Council Report, dues must be set one year in advance of known requirements and for this reason the accuracy is doubtful. The budget does not include adding any employees in the Executive Office and only nominal raises. The budget herewith submitted is predicated on Journal revenue and dues for membership remaining the same. A separate budget is submitted for the Public Policy Committee and is predicated on the money now on deposit to the Committee and with no 1950 appropriation being made to the Committee.

BUDGET INCOME

1350 Members @ \$42.00	\$56,700.00
Journal Revenue (Anticipated)	13,500.00
Bond Interest	167.50
TOTAL	\$70,367.50

EXPENDITURES

Annual Meeting	\$ 2,500.00
Post Graduate Committee	4,000.00
Travel Expense for A. M. A. Activities (Delegates and Officers)	2,500.00
Directory	500.00

Auditing	400.00
Dues and Subscriptions	100.00
Employees Insurance (Hosp. & Med. — Un- employment Tax)	575.00
Supplies	1,500.00
Postage	1,500.00
Press Clipping Service	200.00
Reut	3,600.00
Telephone and Telegraph	500.00
Stationery and Printing	250.00
Miscellaneous Expense	1,000.00
Legal Expense	1,500.00
Journal Printing and Engraving	12,500.00
Salaries	26,300.00

TOTAL	\$59,425.00
Income Over Expenditures	\$10,942.50

PUBLIC POLICY COMMITTEE INCOME

Income	None
Cash on Hand	21,559.01

TOTAL FOR 1950	\$21,559.01
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EXPENDITURES

Literature — Visual Education	\$ 3,500.00
Telephone-Telegraph	1,200.00
Travel	1,000.00
Radio	1,000.00
Stationery, Supplies, Office Expense	1,200.00
Newsletter	500.00
Postage	1,200.00
Employee Insurance (hosp. & med. — Un- employment, Social Security)	115.15
Newspaper Advertising	1,500.00
Meetings (Sponsoring of meetings such as Dr. Gampell)	1,700.00
Women's Auxiliary (Anticipated Deficit)	1,000.00
Salary	3,600.00
Miscellaneous	500.00

TOTAL EXPENDITURE	\$18,015.15
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Cash On Hand over Anticipated Expenditure ..	\$ 3,543.86
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CONSOLIDATED REPORT OF BUDGETS O.S.M.A. AND PUBLIC POLICY COMMITTEE ASSETS

Association (dues)	\$70,367.50
Public Policy Committee, Cash on Hand, No Income	21,559.01

\$91,926.51

EXPENDITURES

Association	\$59,425.00
Public Policy Committee	18,015.15

\$77,440.15

CASH ASSETS OVER EXPENDITURES	\$14,486.36
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Attention is directed to the fact that the above consolidation will not allow for 1951 operation of a like budget in view of the fact that the carry over of \$21,559.01 of the Public Policy Committee will be \$3,543.86 instead of the present carry over amount. The total surplus of both the Association and Public Policy Committee cash assets of \$14,486.36 will be available for appropriations but it places the Association in the position of having decreased its total cash asset, exclusive of 1950 dues collection income by \$7,072.65.

COMMITTEES OF THE ASSOCIATION

As each of us know, the functions and activities of the Association are worked and developed through Committees. Your Council each year is confronted with multiplying requests for medicine's participation in

many programs not heretofore participated in. Your Council in most instances has appointed special committees for such activities. Your Council, however, realizes that there should be more continuity of purpose and administration for these increasing problems and therefore requests the approval of the House of Delegates for its proposal to revamp the committee structure of the Association to bring about a greater committee field of coverage.

A. M. A. MEMBERSHIP AND EDUCATIONAL PROGRAM

Your Council would call to your attention that for 103 years no dues were required for membership in the A. M. A. although no other like organization operated in a similar manner. Your Council is further of the opinion that support of the A. M. A. by dues paying members is fundamental and that the basic principle of the A. M. A. in educating the public to the advancement of medicine is sound to the end that each individual physician and his county society has and should continue to support the program of the A. M. A. in its entirety.

Your Council feels that in this field the profession will continue to endorse the increasing of medical educational facilities for the education of medical students. Your Council would point out that in too many cases the general public is of the opinion that organized medicine is opposing such increases when in reality the Oklahoma State Medical Association has at each session of the legislature urged that sufficient appropriations be made to the medical school to accomplish this purpose.

Your Council recommends that all legislation which brings Federal appropriations into the financing of medical schools be opposed on the basis of the principle that that which the government subsidizes it controls.

Your Council endorses and compliments the medical school on the establishment of its preceptor program. However, your Council would point out that this program must embrace and point up the social and economical aspects of rural life as well as scientific medicine.

Your Council would also point out that the education of the medical student is not complete until such time as he is acquainted with the aims and purposes of county, state and the American Medical Association and requests the endorsement of the House of Delegates in requesting that senior students be given an opportunity to have instruction in such fields.

AMALGAMATIONS OF COUNTY SOCIETIES

During the past year there have been two requests for changes in the Charters of County and District Medical Societies as follows:

1. The amalgamation of Carter-Love-Marshall to form a District Society.
2. The addition of McIntosh County Medical Society to the Muskogee-Sequoyah-Wagoner District Society to form the East Central Medical Society. These requests have met all requirements of the Constitution and By-Laws and your Council recommends the House of Delegates approve these requests.

Your Council has likewise received a request for the dissolution of the Pontotoc-Murray District Society. This request meets with the approval of the physicians of both counties and your Council recommends the requests be approved by the House of Delegates.

MEDICAL BOARD OF EXAMINERS

Your Council wishes to commend the Medical Board of Examiners upon the publication of its directory of licensed and registered physicians together with the laws governing the practice of medicine.

The attention of the House of Delegates is called to the law governing the placing after the person's

name the proper identifying words or letters to indicate his school of practice. Your Council would urge each of you to return to your counties and be certain that no physician is in violation of this law. It is extremely difficult for the Board of Examiners to request discipline of the culprits in this regard when members of the medical profession themselves are in violation.

Your Council has likewise had brought to its attention by the Board of Examiners the need for additional legislation if the Board is to function properly in the enforcement of the medical laws. The Board of Examiners has presented to the Council the need for the enactment of a bill to give the Medical Board the right of the writ of injunction in order that the Board may bring civil action in their own name to enjoin illegally practicing medicine. Under present laws such actions must be brought with the approval of and in the name of the County Attorney which in some instances is impossible. Your Council has approved this legislation and requests House of Delegates approval of its actions.

GRIEVANCE COMMITTEE

The Grievance Committee which was established by the House of Delegates in 1949 has considered and disposed of 19 complaints. There are 10 complaints still being considered by the Committee. The complaints have, in the majority of instances, been based on either an assumed overcharge by the physician or dissatisfaction with the manner in which the physician has rendered care to the patient. So far the Committee has been able to work out mutually satisfactory settlement between the physician and the patient although a few of the pending cases have not brought forth the same cooperation from both interested parties as in the instances of the settled cases.

The Committee soon after its establishment found that some complaints of a rather serious nature were coming to the Committee from physicians, concerning other physicians, hospitals, etc. The complaints were of such seriousness and complicated nature that they were deemed of sufficient importance to be investigated by the Committee although the Committee was not originally cloaked with such authority.

While many Delegates may assume that such situations should be handled by the local County Society Board of Censors, your Council is convinced after careful examination that in many instances such procedure would never have succeeded due to local personalities and prejudices, and upon the frank admission upon the part of the officers of the County Societies that such was the case.

Your Council is further of the opinion that such matters should be settled and without publicity. Your attention is directed to Chapter 7, Section 5b of the Constitution and By-Laws which sets out that matters of ethical practice brought to the attention of the Association through its officers or members of the Council shall be heard by the Council. Your Council in no way shirks its responsibility but does recommend that the house of Delegates approve the Council's recommendations that the Grievance Committee function as the investigating and screening committee in behalf of the Council on such matters and report its findings to the Council in executive session. The Council in turn to make such disposition of the complaints in a matter deemed prudent and expeditious.

PREPAID VOLUNTARY HEALTH INSURANCE

Your Council brings to the attention of the House of Delegates the need for a complete understanding of this vital issue. No delegate here today needs to have impressed upon him the basic issue at stake. If the population will, in the American way, take care of its

own health needs there will not be any need for a governmental program. Your Council fully realizes there are many problems involved in the operations of these voluntary health insurance programs which must be worked out through the mutual cooperation of the company, the hospital, and the physicians to give the public that which they desire and are demanding. Your Council, however, feels that it must point out to the House of Delegates that in some areas of the United States there is a growing tendency for hospitals to take over certain functions and procedures that by law are the practice of medicine. Your Council views this practice with alarm and is of the opinion that this problem must be considered and solved as soon as possible. Your Council recommends that a committee be appointed to meet with the hospitals, and the prepaid voluntary health organizations to attempt to resolve this question.

MALPRACTICE INSURANCE

Your Council reports to the House of Delegates that as of May 15, 1950, over 1,000 members of the Association enjoy the rate schedule of the master policy held with London and Lancashire Indemnity Company. However, your Insurance Committee has reported the startling incident of increases in the number of malpractice suits being filed against physicians. Your Council would also call to the attention of the House of Delegates that recently a jury awarded a plaintiff a judgment of \$60,000.00. Unless the profession will recognize the responsibilities in this field, there is nothing that can be done to combat a raise in insurance rates. Your Council would also urge each member to evaluate his coverage and be certain it is adequate.

ANNUAL MEETING

Your Council would point out to the House of Delegates that this year's Annual Meeting being held in this building is a departure from previous practice of holding the meeting in hotels. Your Council hopes that each delegate will attend the meeting and consider the technical difficulties involved in its promotion. As the meeting grows in size and importance its housing problems likewise multiply. Your Council requests the opinion of all members upon this activity of the Association to the end that yearly arrangements will be made for the benefit of the majority of the members.

EMERGENCY MEDICAL CARE

Your Council has recently had forcibly brought to its attention the need for civilian planning for emergency hospitals and medical care in times of disaster. The changing complexion of national, state and local defense should war come to this country points up the great responsibility that will rest upon the hospitals, physicians, and allied professions. Your Council has requested your Committee on Emergency Medical Care to take immediate steps to develop plans and procedures in this field and requests the complete and unqualified support of each County and District Society and its individual members.

WOMEN'S AUXILIARY

Your Council cannot over-emphasize the tremendous importance of the Auxiliary. The work in the field of public relations and the combatting of compulsory health insurance done by the Auxiliary has been exceptionally outstanding. Your Council is proud of the Auxiliary and urges each of the members to give his unqualified support to its promotion and activities. Your Council likewise wishes to make public expression of its gratitude for the untiring efforts of the officers and Committee workers at all levels of the Auxiliary.

ALLIED PROFESSIONS AND ORGANIZATIONS

Your Council is of the opinion that the House of Delegates will concur in the observation that there must

be close liaison among the professions. While over the years there has been cooperation in mutual problems it is your Council's opinion that a still closer liaison should be effected on the National, State and local level. Your Council intends to intensify its activities in this respect during the coming year.

Your Council also compliments and commends, and urges each of the members to do likewise, the excellent work being done by the Medical Service Society and the Oklahoma State Medical Assistants Society. These men and women play a vital part in medicine's day by day effort to give better medical care to the people.

POST GRADUATE EDUCATION

Your Council realizes the importance of post graduate education. The delegates' attention is called to the increased activities of the medical school in this field. Your Council would also call to your attention that no longer will the Commonwealth Fund give financial support to the Postgraduate Program of the Association; it having already supported the program for two years in excess of its policy of assistance. Your Council feels that this program should nevertheless be continued and fully endorses the request made by the Post Graduate Committee in its report and has placed in the budget sufficient monies to support the program.

AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

Since the last meeting of the House of Delegates there have been additional changes needed in the Constitution and By-Laws to improve the working structure of the Association.

Naturally the principle amendment for consideration of the House of Delegates will be that which was approved and recommended to this House of Delegates by the Delegates from the county societies who met in Special Session to consider the manner in which members of the Oklahoma State Medical Association would be members of the A. M. A. This amendment which makes membership in the A. M. A. synonymous with membership in the Oklahoma State Medical Association has the unanimous support of the Council. Your Council recommends the adoption of the following amendments to the Constitution and By-Laws:

CHAPTER I, Section 2 — Sub-Section (b)

Line 3, after the words "in this Association", and before the words "have been received", insert "and the American Medical Association."

CHAPTER X, Section 1

The first paragraph to be designated sub-section "(a) Oklahoma State Medical Association Dues."

Sub-section "b" to be inserted, reading as follows: "(b) American Medical Association Dues."

"All active members of this Association shall be required to pay such annual dues and/or Special Assessments of the American Medical Association as may be levied by its House of Delegates. American Medical Association dues and/or Special Assessments shall be collected by the Secretaries of the component Societies and forwarded to the Executive Office of this Association, in the manner provided for State Association Dues or as provided by the American Medical Association."

The second paragraph to be designated sub-section "(c) Half Dues."

CHAPTER X, Section 3.

To be amended as follows: Line 5, following the words "House of Delegates," change the period to a comma, and add the following language: "and as to membership status in the American Medical Association."

FIFTY YEAR IN PRACTICE RECOGNITION

Since the creation of this award there have been 52 physicians so honored, as follows. Your Council urges each County and District Society to service its membership to ascertain if any of its members are qualified for this award.

J. Hutchings White, M.D.	Muskogee, Oklahoma
J. B. Clark, M.D.	Atoka, Oklahoma
Sam McKeel, M.D.	Ada, Oklahoma
W. D. Baird, M.D.	Oklahoma City, Oklahoma
John A. Reek, M.D.	Oklahoma City, Oklahoma
W. W. Turlington, M.D.	Seminole, Oklahoma
J. S. Fulton, M.D.	Atoka, Oklahoma
J. M. Postelle, M.D.	Oklahoma City, Oklahoma
W. A. Tolleson, M.D.	Eufaula, Oklahoma
J. L. LeHew, M.D.	Pawnee, Oklahoma
L. D. Bruton, M.D.	Muskogee, Oklahoma
Ralph V. Smith, M.D.	Oklahoma City, Oklahoma
W. W. Rucks, M.D.	Oklahoma City, Oklahoma
O. W. Rice, M.D.	McAlester, Oklahoma
John Allison, M.D.	Tahlequah, Oklahoma
J. V. Athey, M.D.	Bartlesville, Oklahoma
J. P. Beam, M.D.	Arnett, Oklahoma
S. L. Burns, M.D.	Stonewall, Oklahoma
W. Albert Cook, M.D.	Tulsa, Oklahoma
P. H. Maygunes, M.D.	Tulsa, Oklahoma
Walter Hardy, M.D.	Ardmore, Oklahoma
H. A. Higgins, M.D.	Ardmore, Oklahoma
J. B. Harbison, M.D.	Oklahoma City, Oklahoma
T. C. Leachman, M.D.	Woodward, Oklahoma
C. M. Maupin, M.D.	Waurika, Oklahoma
F. H. Norwood, M.D.	Prague, Oklahoma
D. P. Richardson, M.D.	Union City, Oklahoma
C. E. Sexton, M.D.	Stillwater, Oklahoma
Augustin H. Shi, M.D.	Stratford, Oklahoma
C. W. Tedrowe, M.D.	Woodward, Oklahoma
J. P. Torrey, M.D.	Bartlesville, Oklahoma
Ray Holbrook, M.D.	Perkins, Oklahoma
Floyd Warterfield, M.D.	Muskogee, Oklahoma
Jesse L. Blakemore, M.D.	Muskogee, Oklahoma
M. K. Thompson, M.D.	Muskogee, Oklahoma
W. R. Joblin, M.D.	Porter, Oklahoma
T. C. Carlross, M.D.	Morris, Oklahoma
C. S. Petty, M.D.	Guthrie, Oklahoma
Dan Gray, M.D.	Guthrie, Oklahoma
S. P. Ross, M.D.	Ada, Oklahoma
E. L. Collius, M.D.	Panama, Oklahoma
S. C. Dean, M.D.	Howe, Oklahoma
John Paul Jones, M.D.	Dill City, Oklahoma
S. H. Hathaway, M.D.	Mountain View, Oklahoma
Frank W. Rogers, M.D.	Carnegie, Oklahoma
O. S. Somerville, M.D.	Bartlesville, Oklahoma
O. C. Newman, M.D.	Shattuck, Oklahoma
F. L. Wormiugton, M.D.	Miami, Oklahoma
W. M. Gallaher, M.D.	Shawnee, Oklahoma
J. M. Byrum, M.D.	Shawnee, Oklahoma
H. Lee Farris, M.D.	Tulsa, Oklahoma
John R. Callaway, M.D.	Pauls Valley, Oklahoma

1950-51 PROGRAM

In past Council reports to the House of Delegates your Council has presented a detailed program for the coming year. In this report your Council is not going to burden the House of Delegates with a reaffirmation of this same program or attempt to present a new program that perhaps cannot be accomplished.

The Council would point out that the Oklahoma State Medical Association has endorsed and supports the 12 point program of the A. M. A. It likewise requests this House of Delegates to re-endorse the four principle objectives of the Oklahoma State Medical Association which have been endorsed in the past and which your Council feels to be fundamental.

1. Adequate medical care and health service for all people.

2. Extension of public health services in the prevention of disease.

3. Establishment of a Health Planning Board.

4. A closer liaison with the allied professions and the consumer in accomplishing these objectives.

Your Council now requests the House of Delegates to give its consideration to this report and pledges its individual efforts to accomplish these objectives.

After the reading of the Council Report, the Speaker stated that the following points required action to be taken by the House: (1) Budget and Dues. (2) Placing of \$5,000.00 of cash on hand in reserve fund. (3) Request from Medical Board of Examiners for approval to introduce legislation which would give the Medical Board the right to institute legal proceedings in its own name, including the right to petition the courts for writs of injunction. (4) Revamping of Committee Structure (5) Amalgamations (6) Amendments to the Constitution and By-Laws. (7) Endorsement of a Committee to meet with hospitals and prepaid voluntary health organizations to attempt to solve present problems. (8) Appropriation of Funds to Post Graduate Committee.

It was *moved* by D. B. Ensor, M.D., Hopeton, that the budget be accepted and that dues remain at \$42.00 for the year 1951. The motion was *seconded* by several. Motion *carried*.

McLain Rogers, M.D., Clinton, *moved* that \$5,000.00 be placed in the reserve fund from cash on hand, as recommended by the Council. The motion was *seconded* by several. Motion *carried*.

The *motion* was made by W. E. Strecker, M.D., Oklahoma City, that the approval of this House of Delegates be given the Oklahoma State Board of Medical Examiners to introduce legislation which would give the Board power to institute legal proceedings in its own name. The motion was discussed by several and duly *seconded*. Motion *carried*.

Revamping of the committee structure of the Association was discussed and Doctor McLain Rogers, Clinton, *moved* that the House of Delegates authorize the Council to revamp the entire committee structure of the Association. Motion *seconded* by J. W. Francis, M.D., Perry, and *carried*.

It was *moved* by M. O. Hart, M.D., Tulsa, *seconded* by W. K. Haynie, M.D., Durant, that the amalgamation of Carter Love-Marshall Counties be approved. Motion *carried*.

M. J. Searle, M.D., Tulsa, *moved* the addition of McIntosh County to the Muskogee-Sequoyah-Wagoner Society to form the East Central Medical Society. Motion *seconded* by F. R. First, Jr., M.D., Checotah. Motion *carried*.

Bruce Hinson, M.D., *moved* the dissolution of the Pontotoc-Murray amalgamation be approved. Motion *seconded* by L. H. Ritzhaupt, M.D., Guthrie, and *carried*.

M. O. Hart, M.D., Tulsa, *moved* that a committee be appointed to meet with the hospitals and the prepaid voluntary health organizations to solve the problems of hospitals taking over certain functions and procedures that by law are the practice of medicine, as recommended by the Council. Motion *seconded* by Malcom Phelps, M.D. Motion *carried*.

L. W. Bollinger, M.D., Henryetta, *moved* that the amendments to the Constitution and By-Laws be approved as read. Motion *seconded* by P. K. Granning, M.D., Oklahoma City, and *carried*. The Speaker pointed out that final adoption of these amendments to the Constitution and By-Laws could not be made until the

second session as provided in the Constitution and By-Laws.

It was *moved* by V. K. Allen, M.D., Tulsa, that the Post Graduate Committee's request for sufficient monies be approved and placed in the budget. Motion *seconded* by W. A. Howard, M.D., Chelsea. Motion *carried*.

The Speaker asked for action on the recommendation by the Council that senior medical students be given an opportunity to have instruction in the aims and purposes of the county, state and American Medical Association. Onis Hazel, M.D., Oklahoma City, *moved* that the recommendation be approved by the House. Motion *seconded* by Bruce Hinson, M.D. Motion *carried*.

M. J. Searle, M.D., Tulsa, *moved* the re-endorsement of the four principle objectives of the Oklahoma State Medical Association. Motion *seconded* by Malcom Phelps, M.D., El Reno, and *carried*.

The Speaker read the list of names submitted for Honorary Membership as follows: P. P. Nesbitt, M.D., Tulsa; J. Hutchings White, M.D., Muskogee; and J. A. Morrow, M.D., Sallisaw. W. N. Weaver, M.D., Muskogee, *moved* that the three physicians be approved for Honorary Membership. Motion *seconded* by Shade Neely, M.D., Muskogee. Motion *carried*.

The Speaker stated that the following applications had been presented for Life Membership:

Frederick A. Anderson, M.D., Claremore
Leila E. Andrews, M.D., Oklahoma City
A. M. Arnold, M.D., Claremore
William C. Bryant, M.D., Choteau
A. W. Clarkston, M.D., Valliant
N. L. Cornwell, M.D., Coyle
J. W. Craig, M.D., Miami
A. Dixon, M.D., Hennessey
Paul E. Haskett, M.D., Oklahoma City
William C. Gilliam, M.D., Spiro
C. S. Petty, M.D., Guthrie
G. R. Gerard, M.D., Chickasha
S. J. T. Hines, M.D., Tahlequah
A. F. Hobbs, M.D., Hinton
W. L. Mabry, M.D., Leedy
L. H. McConnell, M.D., Altus
G. M. McVey M.D., Verden
D. W. O'Leary, M.D., Norman
John S. Pine, M.D., Oklahoma City
Arthur S. Piper, M.D., Enid
Benjamin W. Ralston, M.D., Commerce
John A. Reck, M.D., Oklahoma City
James F. Renegar, M.D., Tuttle
William H. Rhodes, M.D., Enid
J. L. Wharton, M.D., Depew
M. R. Robberson, Sr., M.D., Wynnewood
F. W. Rogers, M.D., Carnegie
S. C. Ruthenford, M.D., Locust Grove
A. H. Shi, M.D., Stratford
Wm. M. Taylor, M.D., Oklahoma City
Will C. Wait, M.D., McAlester
Jesse E. Wallace, M.D., Tulsa
R. W. Williams, M.D., Anadarko
James L. Miner, M.D., Tulsa
S. W. Minor, M.D., Hinton
M. V. Moth, M.D., Oklahoma City
A. M. Mixon, M.D., Spiro

It was *moved* by F. W. Bollinger, M.D., Henryetta, *seconded* by M. O. Hart, M.D., Tulsa, that each of the physicians be elected to Life Membership. Motion *carried*. Doctor Ritzhaupt stated that Doctor N. L. Cornwell, of Coyle, was now deceased. Doctor Allen stated that James L. Miner, M.D., Tulsa, was also deceased. A *motion* was made by Shade D. Neely, M.D., Muskogee, that although these physicians were deceased they be posthumously elected to Life Membership. Motion duly

seconded and carried.

The Speaker next presented for the consideration of the House of Delegates the recommendation by the Council that the House consider inviting colored physicians to the Scientific Sessions of the Annual Meeting. To bring this before the House the Speaker read the following motion from the Council: *Moved*: that we present the matter of inviting colored physicians, endorsed by the local county medical societies, to the Scientific Sessions of the Annual Meeting, to the House of Delegates. The Speaker stated that in order to bring the matter before the House he would entertain a motion on this subject.

W. E. Strecker, M.D., Oklahoma City, *moved* that colored physicians who are approved by officers of the County Medical Society in which the colored physician resides, be admitted to the Scientific Sessions of the Annual Meeting. Motion *seconded* by Shade Neely, M.D., Muskogee.

M. J. Searle, M.D., Tulsa, *moved* that the motion be amended to read "when the meeting is not held in the hotels and any such invitation to be for only that particular year's session." The motion was discussed and *seconded* by A. R. Sugg, M.D., Ada. Motion *carried*. Following the adoption of the amendment to the motion general discussion was had concerning this proposal. After generous debate the *motion* was *adopted*.

Following the adoption of the motion M. J. Searle, M.D., Tulsa, *moved* that the above action not become effective until 1951. Motion *seconded* by Ned Burleson, M.D., Prague. Motion *carried*.

At this point in the discussion the matter of publicity regarding the adoption of this motion was considered and McLain Rogers, M.D., Clinton, *moved* that publicity in regard to the motion be left to the discretion of the President and the President-Elect of the Association. Motion *seconded* by several. Motion *carried*.

The Speaker stated that several guests were present and introduced F. R. Croson, M.D., President of the Kansas Medical Society, and Mr. Oliver Ebel, Executive Secretary of the Kansas Medical Society. Dr. Croson spoke briefly.

The Speaker asked for the report of the Public Policy Committee. Doctor McLain Rogers, Clinton, Chairman of the Committee, after making a few remarks concerning the growth of the work of this Committee over the year and its future responsibilities, asked John W. Records, M.D., Oklahoma City, Vice-Chairman, to read the report. Doctor Records prior to reading the report, presented a film entitled "This Is Your Health," which will be distributed through the theaters of the state during the coming year. Following the showing of the picture the following report was read by Doctor Records:

REPORT OF THE PUBLIC POLICY COMMITTEE

Part I—Legislation

While your Public Policy Committee is and has always been primarily interested in legislation which affects the health and welfare of the people, the Committee recognizes the fact that at the present time the medical profession must concern itself also with the overall trend toward socialization. Therefore, in addition to the record-breaking number of health and welfare bills which have been introduced in the 81st Congress, this report will attempt to summarize briefly other legislation important to the profession.

No less than eight bills proposing some form of national health insurance are now before Congress. More can be expected. All of these bills are founded on the premise that many Americans cannot afford the cost of adequate medical care. The administration bill (S. 1679) proposes the use of a payroll tax plus

government funds to finance a system of national compulsory health insurance which would provide medical care for 85 per cent of the population. The other bills variously propose systems of health insurance financed jointly by state and federal funds. Some cover only the medically indigent. Others would include all families having an annual income of \$5000 or less — more than three-fourths of the population. Some of the bills are based on federal subsidization of the existing voluntary non-profit medical care plans.

Some fourteen bills proposing that voluntary medical care insurance premiums be deductible from income taxes have been introduced to Congress this year.

The Committee does not wish to take the time of the House of Delegates to outline in detail the contents of this large number of bills. It does, however, wish to assure the House that legislative developments are followed closely by the Committee and reported to the Council when the necessity for action arises. As an example of this type of action, Oklahoma State Medical Association was one of the groups spearheading the "grass roots rebellion" which resulted in the Senate's rejection of the president's Reorganization Plan Number One last August. This plan would have elevated the Federal Security Agency to cabinet status as a Department of Welfare. It was thought that F.S.A. Administrator Oscar Ewing, the nation's number one proponent of socialized medicine would have been in line for the post of Secretary of Welfare.

There are three additional pieces of legislation to which the Committee would direct the attention of the House of Delegates, inasmuch as all three have bearing on the health and welfare of the American people, all three would further the aims of those who would like to see a system of national compulsory health insurance in this country, and all three have already passed one house of Congress. These are:

(1) The federal-aid-to-medical-education bill (S. 1453) which would have the federal government subsidizing medical schools. And it is known fact that where the government subsidizes, it also regulates.

(2) The school health services bill (S. 1411) which would provide for medical care to all children of school age, regardless of the ability of the parents to pay.

(3) Social Security expansion (H.R. 6000) which includes a proposal for permanent and total disability insurance — a step toward national compulsory health insurance — and expansion of the present Social Security system at vast expense to the taxpayers.

The Committee respectfully requests that the House of Delegates again voice unalterable opposition to any form of socialism in this country.

Because of the length of this report, the Committee will not attempt to forecast the situation regarding the coming state legislature. The Committee feels that the usual problems can be anticipated and that additional problems are quite likely to arise in connection with the growing interest of the federal government in state governments.

Part II—State Educational Program

During the past year your Public Policy Committee has noted an increasing awareness on the part of the people of Oklahoma of the grave danger to individual liberty which lies in the Welfare State philosophy. This increased awareness is reflected in the press and in the number of requests the Committee receives for speakers and literature on health insurance and related questions.

Your Committee feels that some part of the credit for this increased public awareness is due the Association's educational program, but that credit must be given

also to the Auxiliary, to the National Education Campaign of the A.M.A., and to the numerous other groups — civic, professional and business — which are actively opposing any further encroachment of socialistic principles on the American scene.

The importance of continuing the educational program on national, state and local levels cannot be overestimated, in the opinion of your Committee, and the need for individual physicians to give their time and energies to this program still is acute.

Your Committee has recognized the value of the A.M.A. National Education Campaign against compulsory health insurance and has attempted to meet its responsibility to provide direction and administration of the Campaign at the state level. The Oklahoma State Medical Association's public relations program has been closely correlated to the four point plan of the National Education Campaign which consists of

1. An effective, statewide Endorsement Drive
2. An intensive Publicity Campaign
3. A well organized, adequately staffed Pamphlet Distribution System
4. An energetic, carefully managed Speakers Bureau

In all possible ways, your Committee has extended its fullest cooperation to the A.M.A. and the National Education Campaign. Representatives of the Association have attended all national campaign meetings and have also appeared before the Board of Trustees in an advisory capacity.

Recognizing the importance of public speaking as a medium in public relations, your Committee and the Auxiliary have attempted to fill every request for a speaker, although the personnel for organizing and operating a Speakers' Bureau has not been available from the Executive Office. During the past year 800 audiences have been reached and 300 kits for speakers have been distributed to members of the profession and the Auxiliary, interested lay persons, and high school and college debate students.

The Committee has also sponsored the appearances in Oklahoma of several speakers of national reputation, including Ralph J. Gampell, M.D., and John W. McPherrin, and hopes to bring others to the state.

Your Committee has worked since its inception to build good press relations for the profession and feels that much has been accomplished in this field. During the past year, some 15,000 column inches of news and editorial comment related to the medical profession has appeared in Oklahoma newspapers. News releases sent out periodically by the Association receive excellent press. Several newspaper ads have been sponsored this year by the Committee in cooperation with the various County Medical Societies.

The Committee hopes to hold a conference of representatives of the press and the medical profession during the coming year to discuss the mutual problems of the two professions.

The establishment of the Grievance Committee has been, in the opinion of the Public Policy Committee, the Association's most significant action this year in the field of public relations. Feeling that it had a major responsibility to inform the public of the existence and the function of this Committee and the procedure to be followed in bringing a complaint before it, the Public Policy Committee has endeavored to work toward this. The Committee feels that the press of the state met the profession more than half way in this and that the excellent and widespread publicity given the Grievance Committee has increased the value of the Grievance Committee to both the profession and the public.

The News Letter of the Association has been issued monthly, summarizing news of interest to the profession in capsule form and putting particular emphasis on important developments in national legislation and other public relations problems.

The radio program has been continued this year with the "Tell Me, Doctor" series running on nine stations — Ada, Bartlesville, Chickasha, El Reno, Lawton, Muskogee, Norman, Oklahoma City and Tulsa. The Radio Sub-Committee of the Public Policy Committee has auditioned five new programs with a view to expanding the radio phase of the public relations program, but has not found a program of sufficient interest to merit sponsorship. The Committee plans to continue to audition new programs.

A junior and senior high school essay contest on "Socialized Medicine: An Unsound Proposal" which was conducted last fall in connection with the Association exhibit at state fairs was not considered wholly successful by the Committee, as the number of entries in the contest was small. However, holding the contest did serve to distribute a large quantity of literature to homes and schools throughout the state.

Several County Medical Societies are sponsoring the American Association of Physicians and Surgeons Essay Contest this year.

During the past year, 510,000 pieces of the National Education Campaign literature have been distributed in Oklahoma. In addition to this, the Public Policy Committee has sent out some 20,000 additional pieces of literature, including magazine reprints, U. S. Chamber of Commerce material and more than 1100 copies of the John T. Flynn book "The Road Ahead". The Committee would like to call the attention of the House of Delegates to the acceleration in this phase of the public relations program, contrasting the 530,000 pieces of literature distributed in the past year with the 15,000 distributed in the first four months of 1949, as reported at the Annual Meeting last year.

In cooperation with the Woman's Auxiliary, the Visual Education Sub-Committee of the Public Policy Committee presented an exhibit this year at the following fairs and conventions: Garvin County Fair, Seminole County Fair, Tulsa State Fair, Oklahoma State Fair, Muskogee Free State Fair, Oklahoma Education Association and Made-in-Oklahoma Show. More than 600,000 persons saw the exhibit.

The Committee has just completed plans for purchasing the Oklahoma rights to a compulsory health insurance film "To Your Health" produced by Michigan State Medical Society. This film, beginning within thirty days, is to be shown in approximately 150 moving picture theaters throughout the state and will be seen by approximately 350,000 persons.

Because of the great importance of the coming Congressional elections in determining the composition of the Congress which will consider legislation vital to the health and the welfare of the people and the freedom of the medical profession, your Committee with the advice of the Council and the Association's legal advisors, has given serious study to the coming political campaigns. With the approval of the Council, the Committee has requested the President of the Association to appoint a committee in each Congressional District made up of one representative of each County Medical Society in the District. The duties of this Committee are the interviewing of all candidates regarding their views on issues which affect health and welfare and the reporting back to their County Medical Societies on this.

Your Committee would like to emphasize that it feels that every physician should recognize his duty as a citizen to investigate issues and to exercise his voting franchise in the coming elections. The results of a survey made by Ohio State Medical Association to determine how many business and professional people failed to register and vote were reported in a recent News Letter and were sufficiently disturbing to move this Committee and the Auxiliary to take under consideration a plan for conducting a similar survey in Oklahoma.

As the House of Delegates knows, funds for the public relations program through 1949 were provided by \$20 of the Oklahoma State Medical Association dues which were set aside for this purpose. Beginning with 1950, all moneys from dues are to be placed in the general fund and this Committee is to request appropriations as needed. The Committee has been as judicious in expenditures as possible but it would like to point out that if the public relations program is to continue it must be adequately financed.

Your Committee feels that it could not close this section of its report without acknowledging the debt which the entire Association owes to the Auxiliary for its many accomplishments in the field of public relations during the past year and for its wholehearted cooperation with the Public Policy Committee at all times.

Respectfully submitted,
McLain Rogers, M.D., Chairman
John W. Records, M.D.
C. W. Arrendell, M.D.
L. J. Starry, M.D.
Joe L. Duer, M.D.
John E. McDonald, M.D.

The Speaker called on Doctor Gill as Chairman of the Constitution and By-Laws Committee for a report. Doctor Gill submitted the following amendment: Chapter X, Section 1, to be amended as follows: Paragraph 2, Line 6, following the word "dollars" and before the word "or", insert: including all subsistence allowances." Doctor Gill stated that the Committee had no further amendments. The Speaker stated that final action would be taken at the evening session of the House.

The Speaker stated that the next item on the agenda would be the determination of a place for the next annual meeting of the association. He called for invi-

tations. The following letter of invitation was read by Victor K. Allen, M.D., Tulsa.

The House of Delegates
In Convention Assembled
Oklahoma City, Oklahoma
Gentlemen:

On behalf of the Tulsa County Medical Society, I take great pleasure in inviting the Oklahoma State Medical Association to hold its 1951 Annual Meeting in Tulsa.

With the opening of the beautiful new Cimarron Ballroom in the Akdar Theater Building of Tulsa, we have the most complete convention facilities — all within one block of three of our larger hotels. Without the space and other handicaps which may have detracted from our previous Tulsa meetings, we feel it will be possible to stage an excellent convention.

I have as part of this invitation letters from our Tulsa city officials, the Chamber of Commerce, hotel officials and others who will be instrumental in making the Tulsa meeting a success.

The Tulsa County Medical Society will appreciate the opportunity of being host to the doctors of Oklahoma Medicine again next year.

Sincerely yours,
W. A. Showman, M.D.
President-Elect

WAS:j

It was *moved* by Forrest S. Etter, M.D., of Bartlesville, *seconded* by W. A. Howard, M.D., Chelsea, that the invitation be accepted. The motion *carried*.

George Kaiser, M.D., Muskogee, *moved* that the Crippled Children's Committee be requested to investigate the procedure under which the Commission is receiving reimbursement from insurance companies. Motion *seconded* by F. R. First, Jr., M.D., Motion *carried*.

The Speaker of the House advised the Delegates present that the time had come in the session under the special order of business previously adopted by the House for the Delegates to caucus for the purpose of determining their nominees for councilors and vice-councilors from Districts 1, 4, 7, 10 and 13. The Speaker declared the first session closed and announced that the second session would convene at 7:30 with the election of officers at 8:00.

(To be continued in the September Journal)

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EDITORIALS

BOOKS

Every physician who has a good mind can gain knowledge and acquire wisdom by regularly spending a little time with his books each day. Even the swift march of science cannot leave him far behind if he faithfully pursues his intellectual obligations. No physician has a right to deal in human lives without keeping up with his profession. The physician who tries to get on without books is bound to become as blank as Rip Van Winkle after the long sleep. When it is too late to climb out of Sleepy Hollow he awakens with a sad realization of his unpaid debt to humanity and hopelessly accepts his intellectual rags.

There is no excuse for such poverty. Fifty years ago Osler said, "For the general practitioner a well-used library is one of the few correctives of the premature senility which is so apt to overtake him. Self-centred, self-taught, he leads a solitary life, and unless his every-day experience is controlled by careful reading or by the attrition of a medical society it soon ceases to be of the slightest value and becomes a mere accretion of isolated facts, without correlation. It is astonishing with how little reading a doctor can practise medicine, but it is not astonishing how badly he may do it."

Those among the general practitioners who think there is no time for books should read the story of Francis Adams who in the middle of the last century covered a wild outlying district in North Scotland on horseback and found time to read.

After his day's work was done he made his invalid wife comfortable, helped his children with their Latin and Greek and then went to bed with his books. This was Francis Adams of Banchory. Out of that bed; from that union of mind and books came the only complete English edition of Hippocrates. Many other great translations were conceived and born through the same wooing of the immortals. Not only did Francis Adams go to bed with his books, he went to his patients with them in his mind and in his pockets. It was not uncommon to

see him reading on horseback as he went about his work.

Spurning the offer of a University of Aberdeen Chair in the classics he clung to his practice and his books in behalf of his patients.

Richard DeBury said, "O Books! ye alone are free and liberal. Ye give to all that seek, and set free all that serve you zealously."

John Milton's opinion contains good medicine: "For Books are not absolutely dead things, but do contain a potency of life in them to be as active as that soul was whose progeny they are; nay, they do preserve as in a vial the purest efficacy and extraction of that living intellect that bred them."

Finally, William Osler's advice to all physicians was, "Before going to sleep read for half an hour, and in the morning have a book open on your dressing table. You will be surprised to find how much can be accomplished in the course of a year."

THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

On July 1, the offices of the Foundation were moved to the splendid new building on the Medical School grounds. Ground is being broken for the associated Research Foundation Hospital.

These buildings represent the material expression of a people imbued with the cause of scientific progress, aroused in behalf of human weal. This evidence of their interest places a great responsibility upon those entrusted with the administration of this great adventure.

To emphasize this responsibility, we quote the following words from Pavlov. When great sums of money were being spent in support of his laboratory he said, "I worry all the time whether our scientific work will justify these expenditures. We must work hard, strain every fibre. More devotion, greater effort!"

This spirit should animate the efforts of all who accept the privilege of working within the walls of these splendid buildings.

MEDICAL EDUCATION

The medical profession and the people at large would have a better understanding of their mutual problems and would be less critical of medical education, if the true purposes and policies of medical schools were better known. For at least 40 years the one goal in medical education has been the prevention of disease, the scientific treatment of the sick, and the preservation of health.

Unfortunately, many people seem to have the impression that medical educators purposely limit the number of medical graduates. These critics of medical education do not know that medical schools, under the rules and regulations expressly designed to achieve the above mentioned goal, are limited by both physical and financial limitations.

Perhaps the best way to follow the progress of medicine and medical education is to study textbooks such as William Osler's, "The Principles and Practice of Medicine" which first appeared in 1892. This great text has passed through 16 editions and the 17th is now on the press. Other modern texts in the same field though not so rich in their traditions and length of service tell the same story in connection with scientific progress and medical education.

"Considering the obvious problems confronting the medical authors and teachers and deans of medical schools who have the considered aid of the Council on Medical Education and the Association of American Medical Colleges, it is surprising that an aroused but uninformed public finds it difficult to understand the limitations, policies and practices of medical schools.

"Perhaps the most serious current difficulty is the matter of costs. The nature of scientific progress has multiplied the cost of medical education, and the changing socioeconomic conditions have resulted in diminishing returns from private donations, endowments and foundations. In addition to the life and death values in medical education, the people have a more possessive interest than they realize. It is by far the most costly of all types of education. The student capacity of medical schools is limited largely by physical facilities which cannot be increased without large sums of money. More buildings, more equipment, more laboratory space, more hospital beds and more outpatient facilities are among the requirements. The tuition fees can never approach the necessary costs. The people

who clamor for more doctors must realize that the first requisite is more dollars. Today our chief concern hinges upon the increasing costs. Up to now the schools have been able to meet the high costs but how to meet still higher and higher costs is a difficult question.

This naturally leads to a discussion of admissions to medical schools. Out of the thousands who apply only hundreds are accepted. Even with a catastrophic lowering of standards it would be impossible to take all who apply or even all who are scholastically qualified. While this great problem is being seriously considered by medical educators and the regularly constituted agencies interested in medical education, the schools are being blamed by the public for not admitting more students and turning out more doctors. If the popular advocates for more graduates only had a full knowledge of medical education, plus one year's service on the dean's admissions committee, they would forever hold their peace."

Conscious of many imperfections and many unsolved problems with undetermined potentialities, medical schools under the direction of the Council on Medical Education and the Association of the American Medical Colleges are sponsoring a three-year survey, with the avowed purpose of building a medical curriculum that will meet the needs of the American people.

In addition to continuous striving for better service, this plan is representative of periodic organized efforts to bring about improvement. This has been the case since the first self imposed housecleaning accompanied by the Abraham Flexner investigation of the 155 existing medical schools was initiated in 1907. Flexner was working with the Carnegie Foundation for the Advancement of Teaching. His report resulted in the closure of many schools and the elevation of standards for those remaining in the field. Since the reforms set in motion at that time, there have been no radical changes but surveys, reports and recommendations have helped to establish minimum standards, methods of procedure and desirable goals. Those who read these reports must be impressed with the purposes and ideals which invariably champion the public weal.

It is hoped that this brief discussion may help those who read, to realize that the task of medical education is a complex one, and that many unselfish medical teachers and

deans of medical schools with the help of two great volunteer agencies, The Council and The Association of the colleges, are continuously striving to fathom the complexities and to effectively apply the accepted principles and practices.

The members of the State Medical Association in their respective communities must help educate the people with reference to the problems confronting the medical schools. In Oklahoma this is very important. We must look to the legislators for appropriations to keep the medical school on a sound basis. The legislators listen to the voters, therefore, it is necessary to stir the soil at the grass roots where the voters live.

1950 TULSA MEETINGS

On September 28 the annual state meeting of the Oklahoma Tuberculosis Association meets in Tulsa. In spite of all the agitation about the falling death rate from tuberculosis and the new drugs employed in the treatment of the disease, this is no time to rest on our oars. The physicians in Oklahoma should do everything to aid the State and local tuberculosis Associations in their fight against tuberculosis. They should support all organized efforts against the disease and encourage attendance at the state meeting and do what they can to stimulate interest in the Christmas Seal Sale which will soon be upon us.

The Oklahoma-Arkansas Regional Meeting of the American College of Physicians meets in Tulsa September 30. A most interesting one day program, dealing chiefly with recent advances in medicine, has been prepared. The guest speaker, Dr. Walter L. Palmer of Chicago will address the meeting at 3:00 p.m. This promises to be an interesting and profitable experience for everyone who attends.

On October 19, 20, and 21, the Oklahoma State Nurses Association will conduct its annual session in the City of Tulsa. It is doubtful if, on the whole, physicians fully realize the importance of the registered nurse in the pursuit and the progress of medicine. It is well to pause and give her a hand and wish her Godspeed. What would we do without the nurse at the bedside, in the home, in the hospital, in the field of public health and on the battlefield? How would it be if she were not at the supervisor's desk, at her post in the nurses training school, in physicians' offices, in the clinic, and in the operating room? Truly what would physicians and patients do without nurses?

RESEARCH

Our Research Institute is rapidly approaching completion. Full preparations for the Foundation's initial efforts are well under way. The plant is complete and modern in every respect.

Research investigators chosen for work in the laboratories of this Institute will be among the most favored in the world, insofar as opportunity for original research is concerned. Never before have such workers been so favored in physical facilities and scientific freedom. In the past there have been times when the pay for the pursuit of truth was persecution, imprisonment, exile, suicide or execution. Yet in spite of all difficulties we have witnessed the victory of mind over matter, of science over disease.

It is presumed that we may count on the traditional seeking after truth without undue regard for its market value. We are not expecting a Murine vase or a sack of gold but a scientific truth.

With the glorious record of scientific achievement to cheer us and the propitious launching of this great research enterprise we extend good wishes and predict great things.

MEDICAL PRECOCITY

A few days ago while walking to his office the writer was joined by his neighbor's seven year old daughter. As we passed her home, the child's younger sister was playing in the front yard with a hammer and nail. My companion without saying a word snatched the nail away and threw it across the hedge. Nonchalantly she continued the family gossip until we came to end of the block. When she was ready to turn back I took the initiative and said, "Don't you think it was rude to jerk the nail away from your little sister without saying a word." "Yes, but Mother has told her not to play with nails, and besides it was rusty and she might have to take tetanus shots."

As I entered the elevator on the way to my office, a mother was almost strangled by the frantic grip of the babe in arms as she screamed bloody murder. Apologetically the mother said, "She knows you are a doctor and expects a shot."

Obviously the dissemination of knowledge is not wholly dependent upon Whitaker and Baxter.

SCIENTIFIC ARTICLES

THE CRIPPLED LUNG*

JOSEPH W. GALE, M.D.

MADISON, WISCONSIN

Suddenly deprived of the sources of nourishment and oxygen that had been furnished through the blood stream of the mother, the newborn infant exists as an individual. Oxygen must be provided quickly if life is to be maintained, and this comes through the development of independent respiratory movements. At the inception of respiration a vital function becomes established and must be continued.

The mechanics of respiration are complex and deserve more than passing comment. The independent respiratory movements of the infant are adequate to supply the necessary oxygen but are not as efficient as they later become. The lungs and thoracic cage are about of equal size. The thorax enlarges rapidly during the first few weeks of life in contrast to the underlying lungs. This produces an increased surface tension between the visceral and parietal pleural surfaces. Even at rest this tension exists, and the lungs are constantly trying to pull away from the surrounding enveloping walls. If a needle is inserted into the intrapleural space when the lungs are at rest, a reading on a manometer will show a negative pressure of -3 to -5 cm. of water. During inspiration the negative pressure will increase to -7 to -9 cm. of water. As expiration follows, the reading on the manometer will return to the original level. Forceful respiration will cause much greater variations in the readings.

Intrapleural and intrapulmonic pressures are often considered identical. This is not true. At rest, the intrapulmonic pressure is 0 or atmospheric. During inspiration the pressure within the lungs becomes sub-atmospheric as the lungs enlarge with the thoracic cage. The decrease in pressure is continued until the lungs are inflated, at which time atmospheric pressure is re-established. At the beginning of expiration the chest wall and underlying lungs rapidly

decrease in size, forcing the air out through the trachea at a pressure above that of the atmosphere. Coughing, straining, and heavy exercise will increase these pressures remarkably.

The thorax, a semirigid cage which furnishes protection to the underlying structures, is most important because of its contribution to respiratory movements. The ribs at the apex are very short but lengthen gradually as the lower thorax is reached. All ribs are hinged directly or indirectly to the spine or sternum in a way which enables them to move quite freely as necessity arises. The movement at the apex is quite limited while that at the base is marked.

Several groups of muscles are responsible for respiratory movements, but the three most important ones are the diaphragm, intercostals, and scalenes. The diaphragm contracts and descends during inspiration, thereby increasing the size of the thoracic cage longitudinally and accounting for approximately one-half of the total inspired air. The intercostal muscles contribute to the enlargement of the thoracic cage in the anteroposterior and lateral diameters, the external intercostals contributing most to inspiration and the internal group to expiration. The scalene muscles offer an anchor to the upper two ribs against the force of the external intercostals and at the same time contribute to the cephalad shift of the apex.

The movement of the lungs is often compared to the action of bellows but is more complex. The structure of the lungs prevents simple inflation and deflation. The hilar regions consist chiefly of bronchi, blood vessels, etc., and very little parenchyma. As the periphery is approached, more and more functioning tissue is encountered until it reaches a maximum in the terminal one to one and one-half inches of tissue. During inspiration the thoracic cage enlarges in all directions, and the

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association June 5, 1950.

trachea and bronchi elongate moving downward and forward. The peripheral portions of the lungs can then slide forward and downward inflating simultaneously. This movement permits the central and medial portions to inflate according to their structural capability. With the onset of expiration deflation occurs in the same sequence.

If a patient's respiratory system is to be evaluated, certain factors should be kept in mind to serve as a base from which to work. An average individual at rest will inspire and expire around 0.5 liter of air. Approximately 30 per cent of this is used to fill the larger bronchial passages. The air traveling in and out of the lungs during quiet respiration is known as the tidal air. During deep breathing more air is moved. The maximum amount of air that can be inspired over and above a normal inspiration is known as complemental air and is roughly two liters. An individual is also capable of expiring a larger amount of air on forced expiration. This is known as supplemental air and is about 2.5 liters. The respiratory reserve of an individual is therefore accounted for to a great extent by the combined value of the complemental and supplemental air (4.5 liters). These combined with the tidal air are spoken of as the vital capacity.

Complete emptying of the lungs cannot be produced voluntarily during life. Air always remains after maximum expiration. This is known as residual air and amounts to about 1.5 liter in a normal individual. It performs a most important physiologic function in that it insures constant contact between the air and alveolar walls permitting the absorption of oxygen and elimination of carbon dioxide. If the lungs were entirely emptied during expiration, there would not be sufficient time for this vital exchange to occur. So long as the normal physiologic functions involving the cardio-respiratory system remain intact, the body is assured of an adequate oxygen supply under ordinary circumstances. If any pathologic state exists in either the circulatory or respiratory system, the intricately adjusted mechanism is altered and inefficiency results. This paper is primarily concerned with the pathologic states which occur in the pulmonary system and their adverse influences.

Congenital abnormalities of the lungs are rare. *Agensis* may occur infrequently. The remaining lung hypertrophies and fills both pleural cavities with little discomfort to the

individual. Just how efficient the one lung will become in performing double duty in later life has not been determined.

Congenital cystic disease of the lung is being seen and diagnosed with increased frequency. The cysts may involve both lungs or only a part of one lung. They may be small or large, with or without communication with the bronchi. Other congenital abnormalities may be present. Any infant who suffers acute or sudden dyspnea and cyanosis should be examined carefully for cystic disease. Large solitary cysts with a valvular mechanism so arranged as to permit air to enter on inspiration and be retained on expiration may produce a tension pneumothorax which will exert sufficient pressure on the lungs to reduce their function to a point where life cannot exist. In other instances the extent of the disease may be so widespread that very little functioning lung tissue is left, and the patient may fall an easy prey to respiratory infection.

Trauma may reduce respiratory efficiency in various ways, depending upon its intensity. Blows on the thoracic cage often result in only muscular soreness, while more severe injury involving the ribs produces great pain, thereby limiting free respiration. If a sufficient number of ribs are injured and the semi-rigid support is lost, a flail chest exists, and severe respiratory embarrassment will result. Each time inspiration occurs the chest wall collapses instead of enlarging. This produces a paradoxical movement resulting in an incomplete aeration of the lung on the injured side. If a compound fracture of a rib is present and open pneumothorax results, the underlying lung collapses. The effect is also transmitted to the opposite lung with almost equal intensity. The two lungs, although separated by the mediastinum, respond to alterations in intrapleural pressure in the absence of disease as though they occupied a single space. This is because of the flexibility of the mediastinum. The ability of the individual to survive such injury will depend upon the size of the opening in the chest wall and the possibility, through forced respiration, of maintaining adequate air exchange. Bilateral open pneumothorax is compatible with life providing the openings in the chest wall are not too large. Hemorrhage in the pleural cavity following trauma will produce collapse of the ipsilateral lung, the degree of the collapse being dependent upon the size of the hemorrhage and effusion. At times this may be complicated by the collection

of air in the pleural space. If the air can escape during expiration severe symptoms may not occur; but if air is trapped and continues to increase under tension, the accompanying lung will be collapsed first, only to be followed by a shift of the mediastinum to the opposite side with resultant collapse of the contralateral lung and death from asphyxia.

The treatment of traumatic chest wounds if carried out promptly and sanely will be successful in a high percentage of cases. Superficial wounds react well to drugs in sufficient quantity to control pain. Uncomplicated rib fractures can best be treated by the injection of a small amount of one per cent novocain at the site or sites of fracture. Frequently one injection will suffice; if not, it can be repeated. Patients in this category derive little benefit from strapping with adhesive plaster.

Severe injuries involving the thorax, resulting in a flail chest with paradoxical respiration, demand fixation of the chest wall. Wires or towel clips placed so as to be firmly fixed in the ribs and incorporated in a body cast and allowed to remain until healing advances sufficiently to prevent movement will often save lives.

The care of the injured lung with complicating hemorrhage resolves itself into one or two phases. Treatment of shock and aspiration of the blood from the pleural space are most important. The lung, if kept expanded, will frequently stop bleeding and will perform useful respiratory function. In addition, through obliteration of the dead space the lung is kept in contact with the parietal pleura, and small bleeding points in the chest wall may be brought under control. If complicated by a tension pneumothorax, continuous suction must be carried out briskly enough to expand the lung in spite of the leak. Often after a few hours it will become sealed. If marked bleeding continues in spite of frequent or continuous aspiration and shock has been controlled, a thoracotomy is indicated at which time the offending vessel can be ligated under direct vision. Failure to carry out these procedures may result in an empyema or a permanently collapsed lung which will necessitate decortication at a later date or even loss of life.

Inflammatory diseases account for a great proportion of crippled lungs either as a result of their immediate effect or as sequelae. *Lobar pneumonia* produces an intrinsic effect on respiration. The alveoli and bron-

chioles are involved in an acute inflammatory process which renders them functionless. The blood vessels remain patent and continue to carry blood to the diseased lobe where it cannot be oxygenated but has to return with a very low oxygen saturation to be mixed with the well aerated blood from the functioning areas. This accounts for a reduction of the oxygen saturation of the blood from the normal areas, the amount of reduction depending upon the extent of the disease. If the involvement is severe enough, grave anoxemia will result. In *bronchopneumonia* smaller and more widespread areas of lung tissue are rendered useless due to plugging of the bronchioles and alveoli with exudate, but the terminal effect is similar to that encountered in lobar pneumonia. This is frequently more serious because of a more extreme oxygen desaturation of the arterial blood. These diseases when uncomplicated are of short duration and if given proper medical treatment soon permit the return of normal pulmonary function. The most common surgical complication associated with pneumonia is empyema, which if not given prompt definitive treatment will leave the lung in a collapsed and functionless state. Infection of the pleural space usually occurs as a complication of bronchopneumonia and as a sequel to lobar pneumonia. Empyema is not frequent since the discovery of penicillin and sulfa drugs, but it occurs often enough to deserve attention. In early stages it occurs as a serous or serosanguineous pleurisy. The patient is usually very ill with the primary disease (pneumonia) at that time. Later, as the pulmonary condition improves, the fluid in the pleural cavity thickens and ultimately becomes frankly purulent, at which time it is spoken of as empyema. If aspirations and drug therapy have not controlled the formation of the fluid and permitted the lung to remain fully expanded after a two-week period, dependent and adequate open drainage is mandatory. If fluid is allowed to remain and splint the underlying lung in the collapsed position, fibrin will collect on the pleural surfaces, organize into fibrous tissue, and form a rigid peel which will render the involved lung functionless or badly crippled. Drainage, carried out once the peel has formed, will be of no avail since the lung cannot expand. Originally, in such cases, the space had to be obliterated to accomplish healing. This was done by removing long segments of ribs, muscle bundles, and parietal pleura so that the soft tissues of the chest wall could be

brought in apposition with the collapsed underlying lung. During World War II a procedure known as decortication was popularized. This operation consisted of opening the chest and removing the fibrous peel which held the lung in the collapsed position. Immediate expansion was obtained and maintained by suction through a small catheter in the chest wall. The patient recovered when otherwise he would have been a respiratory cripple. The need for decortication should seldom arise in empyema if it is diagnosed in time and adequately treated.

Bronchiectasis, a chronic inflammatory disease, is usually acquired following acute respiratory infections and acute exanthemata. The bronchi become dilated due to destruction of their supporting walls. Not infrequently they are lined with granulations which have entirely replaced the bronchial epithelium. These granulations are constantly bathed by purulent secretions which at times are very putrid. The purulent material is coughed up in very large quantities, especially soon after arising in the morning. Severe repeated hemoptysis is not infrequent. It is a progressive disease and may destroy the function of an entire lobe or lobes of the lung depending upon its distribution. Individuals thus afflicted are subject to recurrent bouts of respiratory infections and pneumonia, each attack adding to the damage already existent. The low grade toxemia added to the mechanical destruction of the pulmonary tissue will in extreme cases lead to amyloidosis. The treatment of bronchiectasis has varied a great deal, and nearly every remedy has been tried with indifferent results until removal of the diseased tissue was accomplished. At first the removal of a diseased lobe or lobes was associated with a high mortality, but with the refinements of surgical technique and the use of penicillin the mortality following such operations is no higher than that of gastric resection. Resection should be carried out early, when the disease is limited to one lobe.

Lung abscess may be acute or chronic. In the former case it begins with the acute symptoms of pneumonia. Any distinction between the two diseases is impossible in the early stages. Later, with localization, excavation, and the signs of copious sputum, the diagnosis becomes obvious. The causes of lung abscess vary. Influenza, pneumonia, particularly the aspiration type, foreign body, and tonsillectomy are the most common etiological agents. The acute phase is

accompanied by pneumonitis and grave toxemia. Destruction of lung tissue is often localized to one lobe but an entire lung may be involved. In extreme cases gangrene develops and causes early death. Most abscesses of the lung react like the ordinary furuncle and pass through the usual stages of inflammation. About 50 per cent heal spontaneously. The other 50 per cent continue to produce the signs and symptoms of a chronic inflammatory process consisting of fever, purulent sputum, and low grade toxemia. These signs and symptoms are the result of inadequate drainage of the abscess or abscesses. Each factor is contributory to a crippling effect upon the lung. Various forms of therapy have been used in the treatment of chronic lung abscess but the most successful has recently been shown to be resection of the diseased area or lobe. The treatment in lung abscess is little different from that used in bronchiectasis. The two diseases are frequently indistinguishable as separate clinical entities. In most instances they are both present.

Tumors involving the respiratory system can be classified as intrinsic and extrinsic, each type producing a crippling effect upon respiration.

The most common intrinsic tumor is *bronchogenic carcinoma*. This lesion is most frequent in the male after the fifth decade. It usually occurs in one of the large bronchial passages and remains asymptomatic, as does carcinoma of the stomach, until complications arise. The most common of these are bronchial obstructions, infection, atelectasis, and pulmonary damage. In fact, bronchogenic carcinoma is often marked by the signs and symptoms of the resultant infections; namely, bronchiectasis and lung abscess. The early signs and symptoms are characterized by their vagaries; and unless the clinician is aware of the possibilities and takes every precaution to rule out the cause of these warning signs, the patient will soon proceed to the terminal stages of the disease before treatment is instituted. The only possible answer to this problem is to rule out new growth (bronchogenic carcinoma) in every patient who has had hemoptysis, change in character of cough, chest pain, loss of weight, and dyspnea. These can be easily evaluated through a thorough examination utilizing X-ray, bronchography, bronchoscopic examination, and Papanicolaou stains. Less than one-third of the cases of carcinoma of the lung which have come to the surgeon can be

given more than palliative treatment. This deplorable circumstance is due to two factors, namely: 1. Carelessness on the part of the physician, and 2. neglect of the patient in seeking advice when the early symptoms occur. Carcinoma of the lung if seen early can be cured by resection like carcinoma of the breast, and the final results are better than those obtained following resection of the stomach for gastric carcinoma.

The most common tumor of a benign nature and that which occurs in the fourth and fifth decades of life is *bronchial adenoma*. It may be found in the trachea or large bronchi and is most common in the female. It is insidious in onset and the first warning of its presence may be copious hemoptysis. If this does not occur, obstructive signs in the form of atelectasis, lung abscess, bronchiectasis or emphysema may follow. Much discussion has arisen as to the exact nature of these tumors and their pathologic character. There is evidence which shows that some become malignant and these are characterized by their recurrences. Regardless of this, their complications due to obstruction result in depletion of pulmonary function and removal or resection is mandatory. The earlier definitive treatment is employed the more sure one can be of the nature of the tumor and the reduction of complications.

Extrinsic tumors, particularly those involving the mediastinum, are numerous and the most common will be mentioned. Dermoid and teratoma of the mediastinum are often confused since both occur and produce symptoms at the same time in life, usually between 20-30 years of age. Dermoid should be thought of as a tumor arising from a single germ layer consisting of the epidermis, derma, and derma glands; while teratoma consists of tissue derived from more than one germ layer, such as bone, cartilage, thyroid, gastrointestinal tract, etc. Both tumors grow silently and may become quite large, pushing the lung to the side and frequently causing diminution of function of

most of one lung. The most common symptoms of dermoid are pressure, dyspnea, and cough which may be productive of hair due to ulceration of the tumor into the trachea. These tumors are most frequently found in the anterior mediastinum but may occupy the entire pleural cavity. A teratoma is more likely to undergo malignant changes, and once diagnosed should be removed.

Other tumors of the mediastinum, which include lymphomata, thymoma, cysts, neurofibromata, thyroid adenomata, and aneurysms, may through their location and size cripple respiratory function. Each of these must be treated in the accepted manner. Likewise, other inflammatory diseases including fungus infections, adenomatosis, tuberculosis, etc., too numerous to mention in this paper, must be seriously considered for their marked effect on the efficiency of pulmonary function.

It becomes obvious that many conditions including trauma, inflammation, and new growths alter the physiologic adjustment of the delicately balanced respiratory system. The most common of these have been mentioned and their treatment discussed briefly.

During the past 15 years the progress of chest surgery has been rapid. Diagnostic procedures of a specific nature are available to help the physician establish an early and correct diagnosis. Failure to utilize all methods available to the physician bespeaks a sin of omission. It is no longer excusable to watch and procrastinate in the treatment of diseases involving the respiratory system, for to do so invites disaster, particularly in the presence of new growths. Many surgeons are now trained in the field of thoracic surgery. Extensive experience has been gained during the development of this specialty. Patients can now be operated upon safely even though the disease present requires the removal of one lung. Knowledge of the availability and safety of this type of treatment is mandatory for the modern practice of medicine.

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INDICATIONS FOR AND RESULTS OF KERATOPLASTY*

CHARLES A. ROYER, M.D.

OKLAHOMA CITY, OKLAHOMA

During the past 150 years many varied procedures and experiments have been performed in attempts to restore vision to eyes with corneal opacities. Successful cases were reported by Von Hippel 60 years ago. Elschmig of Prague, reporting on a series of 203 cases done between 1908 and 1930, obtained clear corneal grafts in 20 per cent. The development and standardization of their early work has produced the accepted procedure of today, the partial, penetrating keratoplasty, in which a portion of the entire thickness of an opaque cornea is replaced by a piece of clear cornea from a donor eye.

Difficulties in the procurement of donor eyes have limited the volume of this surgery except in the larger centers which have eye bank facilities. In these centers the technic has become standardized until it is considered within the capabilities of any competent intraocular surgeon, although familiarity with the particular problems of keratoplasty by preliminary animal surgery is a necessary requisite. Keratoplasty is not indicated in all eyes that are blind as a result of corneal opacities, although in the past few years it has been attempted in practically every type of case since no criteria for surgery existed. As a result of the analysis of cases collected from the larger centers, fairly definite indications have been established and a much better evaluation of prognosis can be made. Doctor Castroviejo, the pioneer in the revival of keratoplasty in this country reports on about 1000 cases and others have reported on series of several hundreds.

The unfortunate over-exuberance of many articles in the lay press has produced many misconceptions in the public mind and even in the minds of many of the medical profession concerning the possibilities of this procedure. Undoubtedly, we have all encountered the hopelessly blind patients who want to

know why they can't have a new eye put in to replace their diseased optics. Each case, of course, presents its own individual problem, because of the greatly varying pathological involvement, but many definite criteria now exist which can prevent much useless work and enable better utilization of the available material.

In the first place, the patient's need for vision balanced against the possibilities must be considered. A partially seeing person who is well adjusted and self-supporting may be better left alone, particularly if he is a one-eyed person. A critical report on a recent series of cases indicated decreased vision in 35 per cent of the total, with loss of light perception in 12 per cent. These were unselected cases. Both Doctor Castroviejo and Doctor Paton have stated that in suitably selected cases considerable improvement of vision could be expected in 90 per cent, and this statement is probably true, at least as far as their own surgery is concerned, for it is a type of surgery in which the skill of the operator is an important factor. As information accumulates concerning the criteria for really suitable cases, the number of patients needing treatment becomes far less numerous. There is, unquestionably a definite reservoir of potential patients which at this time is much larger than the supply of donor material.

It is unwise to consider extremely young or old persons or those who are emotionally unstable. Keratoplasty should be deferred in those whose vision may be improved by a less hazardous procedure such as iridectomy. A wide dilatation of the pupil will usually demonstrate the amount of improvement that can be expected with an iridectomy. Amblyopic eyes or those with known posterior segment pathology are, of course, excluded from consideration.

There is general agreement that the following conditions are definite contraindications to keratoplasty: 1. Corneal opacities with calcareous degeneration, 2. Opacities

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with extensive anterior synechias, 3. Fuch's epithelial dystrophy, 4. Glaucoma, 5. Pemphigus, 6. Active corneal disease, 7. Uveitis, 8. Infections of the conjunctiva or sclera, 9. Leukomas with extensive vascularization, 10. Leukomas involving the full thickness of the cornea unless entirely surrounded by clear cornea. Some of these conditions may be rendered acceptable, although highly unfavorable candidates, by preliminary treatment. Anterior synechia may be severed, intra-ocular tension may be normalized by surgery, infections may be controlled, vascularization may be controlled by radiation, and thick scars may be improved by preliminary keratoplasties, lamellar, or penetrating in order to make a better bed for a final graft. On the basis of the results obtained to date, the percentage of good final results in these cases is very small.

Among the unfavorable cases are some conditions that are listed as definite contraindications by some and barely acceptable risks by others. These are opacities produced by burns or explosions and some corneal dystrophies, such as early cases of Groenouw's dystrophy, bandshaped dystrophies or lipoid degeneration of the cornea. Descemetocoele, blood staining of the cornea, corneal burns due to tear gas, aphakia, complete corneal scars which do not involve the deeper layers, or leukomas in which more than half the graft will be surrounded by scar tissue are also included in this group, varying from less favorable to poor prognosis. The presence of an anterior chamber is necessary for a favorable prognosis.

The most favorable cases are those in which there is a central corneal opacity entirely surrounded by clear cornea, in an otherwise normal eye. These may follow trauma or result from serpiginous ulcer, old parenchymatous keratitis, familial corneal degeneration or disciform keratitis. Old permanent opacities of interstitial keratitis are also included in this category, as is keratoconus in which vision cannot be improved by a contact lens. Although some men state that the post-operative refractive error is so small that this operation should be considered in the treatment of cases of high astigmatism, we have noted in the reports of many cases that the use of a contact lens was necessary following surgery, particularly in cases where the donor material was from stillborn infants, in which cases a high myopia is invariably present. It is not considered advisable to even con-

sider keratoplasty in any individual in which the best corrected vision in either eye is 20/100 or better.

In addition to the use of keratoplasty for the improvement of vision, it is advocated at times as a cosmetic procedure, to replace the old procedure of tattooing, or the use of painted contact lenses. It is also used as a therapeutic procedure in the treatment of progressive corneal diseases. For these purposes the penetrating graft is usually not necessary, but the lamellar type of graft involving only a certain portion of the thickness of the cornea is used. The French ophthalmologists stress this indication for keratoplasty and consider it as useful as the optical graft in that it actually prevents many cases of corneal blindness. Those who have used it in this country appear quite impressed with the usefulness of the procedure. It is indicated in all forms of chronic and recurrent keratitis when the usual treatments are ineffective, the center of the cornea is in danger or a perforation is feared. Best results are reported in keratitis caused by a neurotropic virus, especially herpes simplex or zoster, in deep syphilitic or tubercular keratitis or in any keratitis of indefinite etiology. Therapeutic grafts are usually at the periphery of the cornea.

The results reported by different men in attempting to determine the effectiveness of keratoplasty have been at considerable variance, probably because different standards have been used in each case to evaluate results. One study showed that clear grafts occurred twice as often as improvement in visual acuity, and in a series of 165 cases, improvement in vision occurred in 13 per cent, no change in 52 per cent and loss of vision in 35 per cent. These cases covering a period from 1933 to 1948 with several operators, would suggest that the surgery was not of sufficient volume to develop the best technical skill, and many cases were included which were probably of more or less experimental nature. The same criticism might be made of Doctor Owens report of results on 417 cases, in which 36.2 per cent obtained improved vision. With good selection of cases, this percentage could no doubt be improved, although the results will certainly not be as good as has been the general impression. Nevertheless the fact that hundreds of people, once considered hopelessly blind, can now see, attest the fact that keratoplasty is a practical and accepted surgical procedure when the indications for the operation are present.

DIFFERENTIAL DIAGNOSIS OF A RED EYE*

ALBERT N. LEMOINE, JR., M.D.

KANSAS CITY, MISSOURI

A frequent problem in general practice is the patient with a red eye. In the proper management of these patients, a correct diagnosis is essential. The most important differential diagnosis is between a red eye due to external irritation or infection and a red eye due to intraocular pathology. In general, red eyes due to external irritation or infection are not serious and are usually self-limited regardless of therapy, while red eyes due to intraocular pathology are more serious and frequently result in some degree of permanent visual impairment. It is, therefore, important that those cases with processes leading to visual loss be recognized early so that every effort will be made to minimize the degree of permanent visual impairment.

The most significant diagnostic findings in serious eye pathology are the appearance of the cornea and the reaction of the pupil to light. If the cornea has a smooth surface, with good luster, and if the pupils are of equal size and react well to light, it is unlikely that there is an intraocular process. Corneal haze, poor luster, and abnormal pupillary responses to light should be immediate danger signals pointing toward pathology of a serious nature and a definite possibility of permanent visual impairment.

The common causes of a red eye due to external irritants or infection are: 1. trauma, 2. burns, 3. bacterial or virus conjunctivitis, and 4. allergy.

Trauma — This includes all types of foreign bodies and abrasions. Usually the history will reveal the traumatizing agent, and the ocular congestion is frequently of a localized character. The treatment consists of removal of any foreign substance and measures to prevent secondary infections. One must always consider the possibility of an intraocular foreign body in any patient with a history of trauma due to a flying particle.

Burns — There are two principal types of burns, chemical and thermal. The important factor in the management of chemical burns of the eye is immediate treatment. The damage to the eye and surrounding structures occurs rapidly, and it is only by immediate profuse irrigation that permanent damage can be avoided. After thorough irrigation of the eye, mild antiseptics are usually all that is required. Thermal burns will produce immediate damage to the eye. All therapy is directed toward the prevention of secondary infection.

BACTERIAL AND VIRUS CONJUNCTIVITIS — The degree of redness present in an infective conjunctivitis is extremely variable. The important thing to remember is that a simple conjunctivitis does not cause corneal pathology. There will be good corneal luster. Another diagnostic point is that the congestion is more marked in the conjunctiva away from the corneal margins. It is not unusual for a ring of non-congested conjunctiva to surround the limbus. There may be conjunctival chemosis. However this is not as marked as that found in ocular allergies. The type of discharge, as well as the amount, will vary according to the causative organism. One diagnostic point of value is the presence of an enlarged preauricular node, which usually accompanies a virus infection but not a bacterial infection.

ALLERGY — This is one of the most frequent causes of a red eye. The characteristic features are itching, edema of the lids and conjunctiva, and a ropy discharge which is very irritating to the skin of the lids. While the diagnosis is rarely missed in a severe case, many of the patients with a mild degree of allergic conjunctivitis are treated for an infection. A frequent type of ocular allergy is that produced by drug sensitivity. If a patient under treatment for conjunctivitis has not shown marked improvement within seven days, one must first consider an allergy to the medication. If the patient does have an infection and shows no

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improvement after one week of therapy, we can be quite certain that the drug being used is not effective against the causative organism.

The serious ocular conditions which produce a red eye are: 1. corneal pathology; 2. iritis and iridocyclitis; and, 3. congestive glaucoma.

CORNEAL PATHOLOGY — There are many types of corneal pathology that will produce a red eye. A common type producing a mild congestion, frequently of a localized nature and with photophobia, is corneal vascularization. This may be the result of an old inflammatory process with new blood vessel formation. The important thing to remember is that a cornea containing new blood vessels produces an irritated eye. This irritation will usually continue as long as the blood vessels are patent. The only satisfactory treatment is obliteration of the vessels, usually by radiation therapy. Radiation therapy, however, should never be used about the globe unless one has had experience, because there is real danger that late radiation effects will produce cataracts. Corneal ulcers are usually readily recognized because they produce an opaque area in the cornea, with an ulcerated surface. These eyes frequently suffer marked visual impairment due to resultant scars. It is important that early intensive therapy be used in these cases if scarring is to be minimal.

IRITIS AND IRIDOCYCLITIS — The objective findings in iritis and iridocyclitis are pericorneal congestion, usually some clouding of the cornea, a turbid or muddy anterior chamber, and a small pupil that reacts poorly to light. With this group of objective findings iritis or iridocyclitis is present, and the use of mydriatics and cycloplegics is indicated. Regardless of the etiology, these

drugs must be used. Therapy should be started immediately and then an attempt made at determining the etiological agent.

CONGESTIVE GLAUCOMA — The findings in congestive glaucoma are pain, marked pericorneal congestion, cloudy cornea with irregular surface, and a dilated pupil. With this group of findings, congestive glaucoma is present, and immediate therapy with miotics should be started. All patients with congestive glaucoma should be managed by a physician capable of performing intraocular surgery. This is one of the few real emergencies seen in the practice of ophthalmology, and one where a matter of a few hours may be the difference between sight and blindness.

When a patient has a red eye, the most important decision is whether the red eye is due to a superficial, external process or to an intraocular process. This differential diagnosis can be made in nearly all cases by careful attention to the cornea and pupil. One should always compare the appearance of the two eyes, because in many cases the difference between the two eyes is most striking. If the cornea lacks luster and is cloudy and if the pupil is either larger or smaller than that of the fellow eye and reacts poorly to light, there is probably some type of intraocular pathology. If the red eye is the result of intraocular pathology, the treatment should be managed by someone experienced in the management of ocular disease, because visual impairment is frequently the sequela of these processes. If, on the other hand, the cornea is clear and has good luster and the pupils are of equal size and react well to light, the danger to vision is minimal. This type of process is usually self-limited, and the greatest danger is over-treatment, not lack of treatment.

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Robert M. Becker, M.D., Instructor

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ENROLL NOW

GONIOTOMY IN CONGENITAL GLAUCOMA *

E. N. ROBERTSON, M.D.

OKLAHOMA CITY, OKLAHOMA

One of the most important and least publicized recent advances in ophthalmology is Dr. Otto Barkam's¹ goniotomy operation. This operation has finally provided ophthalmologists with a cure for a high percentage of patients with congenital glaucoma. No other medical or surgical procedure had previously provided anything but very transitory relief of symptoms. Probably one reason that this operation has not been more widely publicized is the relative infrequency with which these cases are seen.

The best results are obtained in the treatment of congenital glaucoma when the diagnosis is made early and surgery is performed promptly. The early symptoms are easily overlooked because the doctor in practice thinks of congenital glaucoma by the term of "buphthalmos" or ox eye as he was taught in medical school. This is the markedly enlarged eye with a permanently clouded cornea. Of course, when the disease has advanced to this stage the chances of cure by operation are very much lessened.

The early signs usually consist of photophobia and clouding of the cornea. The amount of photophobia and corneal clouding may vary considerably. There is also a variable amount of injection of the bulbar conjunctiva and increased lacrimation and blepharospasm. These symptoms are the result of increased intraocular pressure and the later marked enlargement of the globe which follows unless the pressure is relieved occurs because of the elasticity of the corneal and scleral tissues in the newborn.

In the early stages the corneal clouding is confined to the corneal epithelium. Later the clouding involves the stromal tissue. At first the corneal clouding may be completely reversible when the pressure is controlled, but once the deeper layers of the

stroma have been involved a certain amount of the clouding will be permanent even though the tension may be normalized by an operation.

The increase in size of the eyeball is variable. In some cases the eyeball is enlarged and the cornea is cloudy at birth, however, the onset of symptoms may occur at any time during the first year of life. Not infrequently the symptoms have an acute onset.

When the irritative symptoms of the eye are present in an infant without noticeable enlargement of the globe, it is easy to confuse them with the symptoms of an acute conjunctivitis or keratitis so it is extremely important to obtain a tonometric reading of the intraocular pressure in order to establish the diagnosis. While digital estimation of the pressure may be helpful at times, it is essential that the tonometric reading be taken with the infant under a general anesthetic. If the intraocular pressure is elevated there is no doubt about the diagnosis.

Once the diagnosis is established surgery should be contemplated at the earliest possible moment and miotics should be used in the interim.

Up until a few years ago it was believed that the cause of congenital glaucoma was a congenital absence of the canal of Schlemm. It is true that eyes examined microscopically when they are removed because of blindness, irritation and the discomfort encountered in the late stages of the disease do show an absence of the canal of Schlemm.

However, Barkan² has shown by gonioscopic studies of the angle of the anterior chamber that it is blocked in the region of the canal by Schlemm by persistent embryonic tissue and he has further shown that the removal of this embryonic tissue results in normalization of the intraocular pressure. He has seen in at least one case direct gonioscopic evidence of the presence of the canal of Schlemm in a portion of the

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angle from which the embryonic tissue had been removed.

OPERATIVE TECHNIQUE

The technique of the goniotomy operation is in brief the insertion of the special goniotomy knife in the cornea near the temporal limbus. It is then pushed straight across the anterior chamber to the angle opposite the point of entry of the knife and the angle is then incised in this region for approximately 45 degrees.

The goniotomy knife specially devised by Doctor Barkan³ for this operation has a small blade which is about the shape of a right angle triangle and small enough to enter the angle of the anterior chamber. The point is only sharp enough to penetrate the cornea, and the cutting edge which corresponds to the hypotenuse side of the right angle triangle is even less sharp. The operation consists more of a scraping motion to remove the embryonic tissue than of actually cutting.

The anterior chamber angle can be made visible with the use of a contact glass over the cornea. Barkan uses his own specially devised surgical contact glass when the cornea is clear enough to see the angle and then the operation can be done under direct observation. When the cornea is cloudy he does the operation without the contact glass.

I have done the operation both ways, using the contact glass and not using it. There is no doubt that with a clear cornea the point of the knife can be more surely guided into the angle under direct vision using the contact glass. However, the lens is unwieldy to handle and occupies the most of the small space that is available in the operative field. It makes the puncture of the anterior chamber more difficult and there is always the chance that an air bubble will get between the lens and the cornea which would make the lens unusable, and once the knife is in the anterior chamber it is not feasible to stop and put more saline between the lens and the cornea.

Adequate fixation of the eye which is absolutely essential is also more difficult to obtain when using the contact glass. In my opinion the additional technical difficulties caused by the contact glass outweigh the advantages and I no longer use it. I believe that I can strip the angle at least as well and probably better without using the contact glass.

CASE REPORTS

As was mentioned previously this condition is not very common and I have only

four cases to report. Three of these four cases were referred to me by colleagues who knew of my interest in congenital glaucoma.

Case No. 1 was a white female who was three and one-half months old when first seen in April, 1947. The mother stated that the child's eyes had been enlarged at birth. The left eye became noticeably cloudy a short time after birth and the right eye became cloudy about one week before the parents brought the child in. The child shied away from the light at all times.

Examination revealed both corneas to be definitely enlarged (no measurements were taken) and cloudy. There was marked photophobia. A diagnosis of congenital glaucoma was made.

At this time I was not familiar with Barkan's work. Hospitalization was advised for the baby and an Elliott trephine operation was performed on both eyes. The tension prior to operation was 48 in the right eye and 68 in the left (Schiotz). The symptoms were temporarily relieved by the operation, but within six weeks the corneas were again cloudy and the tension was 57 (Schiotz) in each eye. Shortly after this I read of the results Barkan was obtaining with his goniotomies and decided to try it on this patient. Nearly three months elapsed before I was able to obtain a surgical contact glass and a goniotomy knife, and in August, 1947, goniotomy operations were performed on both eyes.

Ten days later there was marked clearing of both corneas and the tension under anesthesia was 28 in the right eye and 17 in the left eye (Schiotz). In December, 1947, the tension in the right eye again became elevated and the goniotomy operation was repeated. The patient was seen the next time in February, 1948. The left cornea was clear, but the right cornea was cloudy and the operation was repeated on the right eye.

Before the operation the tension was 42 in the right eye and 21 in the left eye (Schiotz). The patient was subsequently seen in May, 1948, when the tension was 44 in the right eye and 26 in the left, and in November, 1948, when the last attempt at goniotomy on the right eye was done. The left cornea was clear and the fundus could be easily visualized, and this eye has remained clear. None of the operations were successful in permanently reducing the tension in the right eye.

Case No. 2 was a white male, age 13 months, when seen in April, 1948. His moth-

er stated that at the age of three months, his eyes became enlarged. An ophthalmologist was consulted and bilateral trephine operations were performed with temporary improvement.

In addition to the glaucoma this child also had congenital cataracts and pseudo-hypertrophic muscular dystrophy.

A goniotomy was done on the child's left eye in April, 1948. The tension before operation was 38 in each eye (Schiotz). No post-operative recheck of the tension was done, but when observed the cornea was cloudy. Because the muscular dystrophy was progressive and the child's development was not normal further attempts at eye surgery were not advised.

Case No. 3 was a five year old white male when seen in March, 1949. This child had always had defective vision and the eyes had gradually enlarged since birth. At about the age of three the right eyeball was ruptured when he ran into a chair.

Examination showed a phthisical shrunken right eye. The left eye was markedly enlarged, but the cornea was fairly clear. The fundus could be moderately well visualized and it was highly myopic. The disc showed marked pallor and excavation. Vision was limited to the perception of light. The tension measured 24 in the left eye (Schiotz).

A goniotomy operation was performed on the left eye and the tension when rechecked two months later was 13 (Schiotz). The parents seemed to think the child had some improvement as a result of the operation.

Case No. 4 was a white male first seen in February, 1950, at the age of three days. Both eyes appeared enlarged and both corneas were cloudy. The enlargement and clouding were much more pronounced in the right eye, the right cornea being so cloudy as to nearly obscure the iris details.

The diameter of the right cornea was 15 mm. and the left was 13 mm. Miotics were prescribed every six hours.

The patient was taken to surgery at the age of 12 days and a goniotomy was done on the right eye and six days later one was done on the left eye. At the time of the first operation (after intensive miotic therapy) the tension was 24 in the right eye and 18 in the left eye (Schiotz). Miotics were continued and 10 days later under anesthesia the tension was 18 in the right eye and 11 in the left eye (Schiotz). The right cornea was still cloudy, but the left one was normally clear, and the left fundus appeared to be completely normal. Miotics were discontinued. Three weeks later the tension was 15 in each eye (Schiotz) under anesthesia and the right cornea had cleared enough so that the details of the anterior chamber could be easily seen.

When last seen two months later on May 24, 1950, the tension under anesthesia was 13 in each eye (Schiotz). The right cornea was almost normally clear and the fundus was well visualized and it appeared normal. The left cornea was completely normal in appearance and the fundus showed no abnormalities. Gonioscopy showed both angles to be free of embryonic tissue in the region where surgery had been done.

SUMMARY

The early signs and symptoms of congenital glaucoma are enumerated and a plea is made for early diagnosis and surgery in this condition. A short description of the operation of goniotomy is given and the report is concluded with four case reports from the author's practice.

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PLAN TO ATTEND OKLAHOMA CITY CLINICAL SOCIETY MEETING

OCTOBER 30, 31 — NOVEMBER 1, 2

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THERAPEUTIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Department of Pharmacology

ANTICOAGULANTS

PAUL W. SMITH, PH.D., E. W. YOUNG, JR., M.D.,
AND ROBERT F. REDMOND, M.D.

DOCTOR SMITH: Our discussion today concerns the use of the anticoagulants in clinical medicine. This is an opportune time for the presentation of this topic because we now have adequate clinical evidence and a sufficiently large series of cases for accurate statistical analysis. Until recently many of the impressions regarding the value of anticoagulant therapy were based mainly upon a small series of cases. Dr. Young, what can you tell us concerning recent studies?

DOCTOR YOUNG: The American Heart Association has been interested in collecting statistical information on this type of therapy, and in January of 1949 the first report, preliminary in character, on 800 cases with myocardial infarction was published. The final publication of an initial 1,000 cases to be studied has not yet been made complete in all statistical phases, but at any rate the results thus far look exceedingly promising. The drug that has received the greatest amount of attention in this series has been Dicumarol. A certain number of the first 800 patients received combined Dicumarol and Heparin therapy, but Dicumarol was given alone or as the major drug in 81 per cent of the cases. Less than 14 per cent received the combined therapy and the remaining five per cent either received no therapy for various reasons or therapy was never considered to reach an adequate therapeutic level.

In the initial group of 800, approximately one-half served as controls and the mortality in this group was 24 per cent. The mortality rate in the group treated with Dicumarol and or Heparin was reduced to 15 per cent. These figures are even more impressive when one considers that 12 per cent of the controls for some reason or other, such as pressure on the part of the relatives or because of an embolic episode early in the his-

tory of the case, received some anticoagulant therapy. The amount was considered to be insufficient for full therapeutic purposes, but may actually have reduced the mortality to an appreciable extent.

Even more impressive than this statistical analysis was the difference in the incidence of thrombo-embolic phenomena. The incidence of central or peripheral thrombo-embolism in the control series was 25 per cent, while this condition was found in less than 11 per cent in the series treated with Dicumarol or Heparin or both. This alone is an adequate reason for using Dicumarol, even if one could ignore the lower death rate.

Certainly thrombo-embolic complications can lead to tremendously long stays in hospitals or to the loss of function of an extremity if the embolus happens to strike a vital central nervous system center. In the original series reported in 1946 by Drs. Peters, Guyther and Brambel, there was only one incidence of an embolus occurring in the treated series. This series was less than 100 patients, but was as complete and as well worked up as most of the studies being reported at that time. Other statistics in this latter series which are of importance concern the extension of the actual thrombus within the coronary vessel. In the American Heart Association study, nine per cent of the myocardial infarcts originally reported in the untreated group showed extension, whereas only two per cent in the treated series showed an extension of their infarction.

DOCTOR SMITH: The control and treated groups in the report of the American Heart Association were comparable as to age distribution, severity of the onset of their infarction, length of time elapsing between the onset of the attack, and the time the patient was brought under therapy; in fact, there were as few variables from individual to individual as possible. These cases were 16 large groups and random sampling was used to select the cases. What about the use of anticoagulants in other fields of medi-

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

cine; particularly in the field of surgery?

DOCTOR YOUNG: At any time that thrombo-embolic phenomena occur or appear to be imminent, there is some indication for anticoagulant therapy or other procedures designed to interrupt the passage of the thrombus from its original site of formation to the lungs, to the heart, or to the brain. In some places the danger of thrombo-embolism has led the clinicians to use the drug routinely following major surgery. A report appeared in *Surgery, Gynecology and Obstetrics* in April, 1949, which cited 3,304 cases in which Dicumarol was administered in routine fashion following major surgery. The results in this series gave statistically significant reductions in the incidence of venous thrombosis following either major abdominal or pelvic surgery. The reduction in mortality rate due to fatal embolism was statistically significant, but some argument will exist because of the generally reduced rate of fatal embolism in modern medicine which may be credited to other factors, such as early ambulation and improved anesthetic and operative techniques. There was no evidence of liver toxicity due to Dicumarol in the doses given. This particular series showed the value of a very rigid laboratory standardization and laboratory-clinical cooperation in administering adequate anticoagulant therapy.

DOCTOR SMITH: A question that might be raised is this: What is the danger of hemorrhage following the use of anticoagulants in surgery?

DOCTOR YOUNG: In the 3,304 individuals undergoing major abdominal or pelvic surgery, three required blood transfusions because of a hemorrhage following Dicumarol administration. Minor bleeding was noticed in 76 cases, none requiring more intensive therapy than the administration of one or two doses of intravenous Vitamin K preparations. There were no deaths which could be attributed to Dicumarol itself. This series of cases was gathered over a four-year period from 1944 to 1947 inclusive, and was compared with slightly over 2,000 untreated cases. There were 28 embolic phenomena in the untreated cases, as compared to one case of embolism in the treated series; in the untreated series there were 13 deaths, probably all of them directly attributable to thrombo-embolic phenomena as compared with no deaths due to thrombo-embolic phenomena or to the anticoagulant in the treated series. Both this series and the American

Heart Association study were very rigidly controlled and the results may not be duplicated in smaller groups of patients.

DOCTOR SMITH: Dr. Redmond, have these drugs been used in other fields of medicine?

DOCTOR REDMOND: The use of anticoagulants in other fields has also come into prominence, particularly in the field of ophthalmology, in which a combination of Dicumarol and Rutin has been used in retinal-vascular disorders. A report from the Wilmer Institute of the Johns Hopkins Hospital and the Department of Clinical Biochemistry at the University of Maryland deals with a series of cases, mostly of lateral branch thrombosis or central retinal venous occlusion and certain serous retinopathies. The combination of Rutin and Dicumarol was decided upon because of the increased capillary fragility and increased clotting tendency found in these patients. In this series the combination of Dicumarol and Rutin was used for a period of six months or more and the prothrombin activity was limited to between 50 and 60 per cent of normal. Certainly this is not what one would consider an adequate therapeutic level for treating the other types of thromboembolism. However, sufficiently significant clinical results were obtained to warrant much further clinical evaluation of Dicumarol and Rutin in the field of ophthalmology.

DOCTOR SMITH: What is the place of the anticoagulants in the field of obstetrics?

DOCTOR REDMOND: Generally the use of anticoagulants in obstetrics is limited to those cases in which thrombo-embolic phenomena are proved and definitely diagnosed. One hesitates to add an anticoagulant to the blood of a mother who already has a widely "abraded" surface and further increase the possibility of a postpartum hemorrhage. However, the drug has been given postpartum and, in some certain individuals, in the antepartum state. This is certainly much less common than the routine use of anticoagulants in the fields of internal medicine and surgery. It has been demonstrated that Dicumarol does not pass the breast barrier and that nursing infants do not suffer a prothrombin reduction when the mother is taking Dicumarol.

DOCTOR SMITH: What about other anticoagulants? Would you compare the relative fields of application of Heparin and Dicumarol?

DOCTOR REDMOND: In the past, enthusiasm has been greater toward the use of Dicuma-

rol than toward Heparin. Mainly this is because Dicumarol is given orally, while Heparin must be administered intravenously or intramuscularly. Furthermore, the cost of Heparin is much greater and its duration of action following administration relatively much shorter. However, within recent months, Heparin has been marketed in gelatin solution (Depo-Heparin, Upjohn), which maintains its therapeutic effect over a period of 24 hours with one intramuscular injection. With vasoconstrictors added, 48-hour effect in an adequate therapeutic range is obtainable. However, at this time, it certainly has not gained the vogue that the oral use of Dicumarol has achieved.

These two drugs vary rather widely in their mechanisms of action and certainly in their toxicity. Dicumarol's main site of action is presumed to be in the liver, where it is thought to prevent the production of prothrombin. However there is some doubt that this is the full explanation of Dicumarol's mode of action because its effect sometimes precedes by several hours that which would be achieved solely by preventing the production of prothrombin. It is probable that in some fashion it diminishes the activity of the prothrombin accelerators or the prothrombin activators in the blood.

In contrast to this, the site of action of Heparin is presumed to be at or near the end point of coagulation in which the formation of thrombin from prothrombin is delayed, thereby preventing the combination of thrombin and fibrinogen to form fibrin. For this reason the patient who is receiving Dicumarol and Heparin at the same time may give false low values in prothrombin activity, since Heparin, even in minute amounts, may delay the end point to such an extent that an abnormally low prothrombin response is indicated.

DOCTOR SMITH: What are the laboratory controls necessary in the use of these drugs?

DOCTOR YOUNG: The laboratory control in the case of Heparin is relatively simple. Two or three cc. of blood are drawn from the patient's vein and put in a glass test tube; the tube is tilted at 15 to 20 second intervals until definite coagulation is evident. This procedure is usually done three to five times a day when the aqueous Heparin is being used, and once daily in the case of the gelatin repository type of Heparin.

When Dicumarol is being administered to the patient, the problem of laboratory con-

trol is much more difficult. The method of prothrombin time measurement in current use is a somewhat complicated and not entirely satisfactory procedure. At all stages of the testing procedure care must be taken to prevent contamination of the syringe, glassware or the solutions used in the testing. A conscientious technician must be available to run the prothrombin times and there must be a very close cooperation between the clinician using the anticoagulant and the laboratory which is measuring its effect. Reliable techniques may be obtained from manufacturers of standard thromboplastins, i.e., Maltine, Difco, Squibb, etc.

A very common difficulty, frequently the cause of hypoprothrombinemia of severe proportions, is the daily use of Dicumarol. It must be kept in mind that this drug takes an average of 36 hours to exert its maximum therapeutic effect. Therefore a dose of the drug given on Monday would not show its maximum effect until the following Wednesday. A prothrombin time taken on Tuesday would show little effect of the drug given the previous day. Daily doses of Dicumarol frequently are the cause of cumulative action resulting in sudden, severe hypoprothrombinemia. This may manifest itself either as microscopic hematuria or frank hemorrhage from a body orifice. For this reason the drug should be given on alternate days and prothrombin time done on alternate days. Once a patient begins to exhibit some effect from Dicumarol, future doses should be scaled down slightly until the extent of this individual patient's reaction to the drug is definitely known. There have been reports from some large scale anti-coagulant studies of satisfactory results where the prothrombin time is reduced to 50 per cent of normal or slightly under, rather than to the 20 per cent levels recommended by some laboratories. It must be remembered that the minimal effective therapeutic prothrombin time has not yet been firmly established.

The particular test in most common use, which has proved to be generally satisfactory, is the Link-Shapiro modification of Quick's prothrombin time. Four and one-half cc. of blood are collected in a test tube containing 0.5 cc. of sodium oxylate as an anti-coagulant. The blood is then centrifuged and the plasma withdrawn in a pipette; 0.1 cc. of a standard thromboplastin solution such as may be obtained from Maltine, Difco, Squibb, etc., and 0.1 cc. of the plasma are mixed in a test tube and warmed in a 37

degree water bath. Then 0.1 cc. of 0.025 molar calcium chloride is added and a stop watch started immediately. At the time that a firm meniscus is formed in this solution the end point has been reached. The syringe that is used to withdraw the blood must be clean and dry, as must all of the glassware used in this procedure.

It is a good practice to use, in addition, a 12.5 per cent dilution of the plasma, determining its end point in the same manner as the undiluted plasma. The prothrombin times will be 14 to 15 seconds in the undiluted plasma, and 85 to 100 seconds in the 12.5 per cent plasma dilution. The reasons for using a 12.5 per cent saline dilution of plasma are fairly well established, the most important of which is the possibility of preducting the type of reaction that an individual patient will have to a given dose of Dicumarol. The patient who exhibits a 70 second response in the 12.5 per cent dilution is more likely to be resistant to the drug than one with an 85 to 100 second response. The person with a 120 second response in the 12.5 per cent dilution is more likely to be abnormally sensitive to the action of Dicumarol.

DOCTOR SMITH: The American Heart Association recommends that in the use of Dicumarol the prothrombin activity be kept around 20 to 30 per cent of normal. In the average laboratory where prothrombin times are reported in seconds, this would mean a prothrombin time of between 30 and 50 seconds when the control is around 14 or 15 seconds. In the case of Heparin, it is believed that a coagulation time approximately three times that of normal, i.e., 21 to 22 minutes as compared to the five to seven minute normal, is an adequate therapeutic range. This may readily be achieved with the gelatin preparations of Heparin, but is somewhat more difficult with the constant intravenous drip or the intermittent intravenous or intramuscular administration of aqueous Heparin.

A comparison of the two drugs would be incomplete without a discussion of the contraindications and indications for their use. When rapid anticoagulant action is desired, Heparin is the drug of choice. In these instances the aqueous preparation by intravenous or intramuscular route is to be preferred. In instances where anticoagulant therapy may be delayed for 24 to 36 hours, the oral administration Dicumarol may be used. In many instances, particularly in the treatment of severe myocardial infarctions

due to coronary thrombosis, the early use of Heparin administered simultaneously with oral Dicumarol is the method of choice. Heparin is used to maintain an adequate reduction in coagulability of the blood until such time as the slower acting Dicumarol gains its full therapeutic effect. On the average this requires 36 to 48 hours. Following this, Dicumarol may be used alone or, at the discretion of the clinician, in conjunction with Heparin. Usually, in cases of myocardial infarction, the third to the fifth day is the dangerous period because it is then that the thrombus is in greatest danger of extending itself. At this time, anticoagulant therapy should be most carefully supervised. Dr. Redmond, what are the contraindications to the use of anticoagulants?

DOCTOR REDMOND: There are certain physiologic and pathologic contraindications to the use of Dicumarol. Mainly these are: 1) The presence of liver disease which has reduced the level of prothrombin activity. Certainly Dicumarol, if used at all in these cases, should be used with caution. 2) The presence of severe renal disease. This is obvious because of the fact that Dicumarol is apparently excreted unchanged by the kidney. Deficient kidney action would cause an accumulation of the drug and a sudden, severe hypoprothrombinemia. 3) Any condition in which there is a tendency toward hemorrhage. This includes most of the blood dyscrasias and subacute bacterial endocarditis. 4) Any contemplated or recent neurosurgical procedure, since a very minute amount of bleeding may have serious consequences.

Indications for the cautious use of Dicumarol are the presence of an open wound, a drainage tube or an indwelling catheter, or a bleeding lesion such as may occur in the gastrointestinal tract. Many of these contraindications hold true for Heparin as well, except for the renal damage. Heparin is apparently hydrolyzed or destroyed in some way in the body and is not excreted in significant amounts by the kidney. Any condition in which the liver is not producing the proper amount of prothrombin is a potentially hemorrhagic condition and, as such, may mean that the patient could get into trouble very easily with the injudicious use of Heparin. However, because of its transient action and ready reversibility, Heparin quite frequently is the drug of choice in these conditions where anticoagulant therapy is actually necessary.

DOCTOR SMITH: What does one do when one gets into difficulty with either of these two drugs? How can their effects be counteracted?

DOCTOR REDMOND: Of course, if the difficulty is not too severe time will take care of the difficulty arising from either drug. Certainly time will take care of the Heparin more efficiently than it will Dicumarol. However, in either case, when hemorrhage occurs, whether it be microscopic hematuria or frank hemorrhage in any body cavity, the transfusion of fresh whole blood or of plasma is the most rapid method of restoring the coagulation cycle to normal. In the case of Dicumarol, the hypoprothrombinemia can frequently be reversed by intravenous injections of one of the Vitamin K preparations. Usually the dose is 72 mg. of Menadione or a similar drug. Often this injection must be repeated because the action of a single dose of Dicumarol can persist for 72 hours.

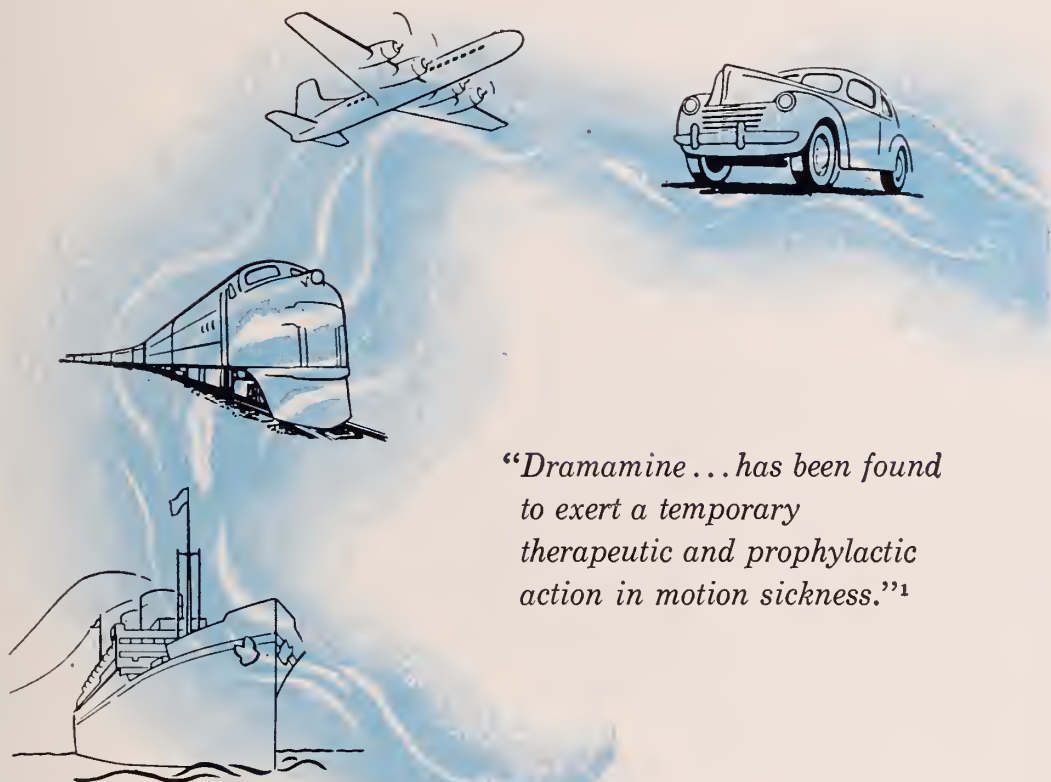
DOCTOR SMITH: Dr. Young, are there any newer advances in the field of anticoagulants?

DOCTOR YOUNG: Recently, in Switzerland a new anticoagulant has been developed which is known by the trade name "Tromexan" (Geigy Co.). Tromexan is a synthetic ethyl acetate ester of the basic Dicumarol nucleus and most of its characteristics are similar to those of Dicumarol. However there are some differences and these are quite important. It is less potent — doses in the order of 600 to 900 mg. are common as compared to the 100 to 300 mg. level in the case of Dicumarol. It is apparently much less toxic at effective dosage levels. There have been fewer gastrointestinal reactions, fewer cases of diarrhea and fewer cases of persistent hypoprothrombinemia or of bleeding. So far the reports of the clinical tests cover only 192 cases, yet in none of these cases was any bleeding demonstrated which could be attributed to the action of the anticoagulant. In 48 of these 192 cases, the prothrombin time was less than five per cent and even in these cases neither microscopic hematuria nor gross bleeding was demonstrated. As compared with the 36 to 48 hour lapse between administration and therapeutic

effect with Dicumarol, Tromexan apparently achieves a significant portion of its therapeutic effect within one to six hours, depending upon the individual case. The effect of a single dose is usually dissipated within 24 hours, as compared to 72 hours with Dicumarol. The degree of the prothrombin depression is much more readily controlled, possibly due to the lesser cumulative effect. In some 40 instances, the drug had been administered for periods ranging from one month to one year, yet in no case was toxicity severe enough to necessitate interruption of administration of the drug. The comment is made in the original report that "the therapeutic range is of such magnitude that in certain instances the drug may be administered even without control of the prothrombin level." However, as with so many early claims of new drugs, this should be accepted with reservation. Certainly use of any drug which tends to produce a hemorrhagic state should have laboratory controls.

These substances also differ in the method used to reverse the hypoprothrombinemia induced by them. In the case of Dicumarol or Heparin, as we have mentioned, plasma or blood transfusions or intravenous Vitamin K can be used. However in the case of Tromexan whole blood transfusions are the most efficacious. Vitamin K has little or no effect. It is recommended in the use of Tromexan that prothrombin times should be done daily until the desired level is reached and then on alternate days. The recommended laboratory control procedures are identical in the case of Tromexan and Dicumarol.

Tromexan introduces the hope that the routine outpatient use of an anticoagulant may be near. If it is indeed true that less stringent laboratory controls are necessary, Tromexan may be much more amenable to office use than is the case with Dicumarol or Heparin. The promptness of the effect of Tromexan in contrast with the slower action of Dicumarol might, to a great extent, obviate the necessity for the initial administration of Heparin in those patients in which rapid anticoagulant action is desired. In general the contraindications for Tromexan are similar to those for Heparin and Dicumarol.



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1. Council on Pharmacy & Chemistry: New and Non-official Remedies, 1950, Philadelphia, J. B. Lippincott Co., 1950, p. 460.

*Trademark of G. D. Searle & Co., Chicago 80, Ill.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE


President's Page

In January, 1939, the Oklahoma State Medical Association hired a full time Executive Secretary. A small room in the Plaza Court Building in Oklahoma City was obtained for his office and he had a part time stenographer. By way of reflection that was a bold venture, but as has been proven many times, a very wise one. Many changes have taken place since that dark day. The office has been enlarged several times and other employees hired to handle the many volumes of work which comes from the office. Few members of our Association are cognizant of the vast amount of work which goes out of that office every day. Someone has said that an Executive Secretary is one employed to create situations and maintain tension. However, it does not seem humanly possible for one individual to create as many problems as this office is asked to solve.

At the present time there are eight full time employees of the Association. For a long period of time there has been an urgent need for more space. During the Annual Meeting in June the Council voted to secure a more suitable place. During the last of July the office of the Association was moved to its new home—1227 Classen Boulevard. It is hoped that every member of the Association will find the time to drop in for a visit and get acquainted with the employees and learn more about the work and activities of your own organization.

During the eleven and one-half years many changes have taken place; events of world wide significance, the most important, of course, being World War II when many of the doctors of Oklahoma closed their offices and put on the uniform of the armed forces. This was a war, all were told, to end wars, and bring about an everlasting peace. Yet within a period of a few years we find ourselves involved in another war, and at this moment no one knows how extensive it may become. Again the doctors are being called upon to serve their country by enlisting in some branch of the armed forces. A short time ago the president of this organization received a telegram from the Commanding General of the Fourth Army requesting first, that support be given to the induction station in Oklahoma, as it was the only one at that time in operation. Secondly, encouraged local doctors to assist in examination of draftees and assure them by so doing they would not assume any military status. Thirdly, to please give thought to setting up a Procurement and Assignment Board, if and when it became necessary or requested. On receipt of this telegram the Council voted to set up a Committee to make a survey of all doctors in Oklahoma, irrespective of their membership in the Association; the committee to be composed of a representative from every Councilor district. In addition to selecting the Committee, and in order to expedite the work, a questionnaire has been prepared and mailed to every doctor. When these are returned the information will be of tremendous value to the Committee in carrying out their job. While we are extremely anxious that our boys in the service have the very best medical attention which can be had we likewise, are anxious that the civilian population have adequate care. One of the chief functions of this committee will be to see that there is economical utilization of the physicians. The question is frequently asked who will be called first. Dr. Elmer L. Henderson, President of the American Medical Association, and some of the top ranking military, say that it should be those doctors who were schooled and trained at government expense. They are said to have a moral obligation, and as an inducement they are offering \$100.00 a month extra salary to those volunteering. Things are moving rapidly. For example, while this page is being prepared the 45th Division has been called. This alone will take 26 doctors in our state.

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President

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PRESIDENT MCGILL APPOINTS MILITARY SERVICE COMMITTEE

Doctor Ralph McGill, President of the Association, following a request from General LeRoy Lutes, Commanding General of the Fourth Army, has appointed a Military Service Committee, which Committee will survey the medical manpower of the state as it pertains to the needs of both civilian defense and the military services. F. Redding Hood, M.D., 1200 North Walker, Oklahoma City, has been appointed chairman of the Committee. The Committee will be made up of physicians from representative parts of the state who will be selected on the basis of military service in World Wars I and II with some members of the Committee representing those physicians who do not have prior military service.

While the Committee has not been asked to act in the same capacity as the Procurement and Assignment Committee of World War II, the information being assembled by the Committee will be readily adaptable for such work. The Committee likewise anticipates that it will be necessary to survey the hospitals of the state as to needs for interns and residents and to arrive at a figure that will allow a continuation of medical education should the situation confronting the nation today call for an all out mobilization effort.

Present members of the Committee are J. D. Shipp, M.D., Tulsa; W. H. Hoover, M.D., Tulsa; Milan F. McKinney, M.D., Oklahoma City; Shade D. Neely, M.D., Muskogee; Joe Duer, M.D., Woodward; J. B. Hollis, M.D., Mangum; and J. F. Park, M.D., McAlester. Doctor McGill has announced that it will no doubt be necessary to augment the Committee with additional members in the near future.

EXECUTIVE OFFICE MOVES; OFFICE, PARKING SPACE ADDED

All physicians in the state are invited to visit their new Executive Office on their next trip to Oklahoma City. Located at 1227 Classen, the former two story residence of stucco construction has been converted to offices housing the Association, the Postgraduate Committee and the Journal of the Oklahoma State Medical Association.

Increased functions and services of the Association long had made filing of records of the Association and storage of office supplies a major problem. Additional personnel made former O.S.M.A. office space insufficient.

The new offices of the Association on beautiful Classen Boulevard are located less than two blocks from the former offices at Plaza Court. A large parking area is another advantage of the new quarters. The Conference Room at 1227 Classen is large enough for all committee meetings and possibly will house the Council Meetings.

Executive Offices of the Association were established in Plaza Court in January, 1939, and the offices of the Journal were moved to Oklahoma City from McAlester in the fall of 1939. During those years the personnel has gone from one (the Executive Secretary) to nine. The new location with the additional space will, for the first time, provide the Editor of the Journal with offices of his own.

Operation of a very active Public Relations Program, both our own, and in cooperation with the National Education Campaign of the American Medical Association, has increased the mailing from the Executive Office. Storage space for the literature for this program, plus a larger mailing room will make the operation of this program more effective.

EMERGENCY MEDICAL CARE COUNCIL MEETS WITH MILITARY LEADERS

In light of the action of most state medical associations in surveying the health facilities of the states, the Council on Emergency Medical Service of the American Medical Association has met with military leaders to work out a procedure to provide for the military call on a priority basis of physicians needed for national defense.

The council's recommendation, submitted to the A.M.A. Board of Trustees for approval, placed emphasis on the first call of the nearly 8,000 non-veteran physicians who received training at government expense during and since World War II and of all others who were deferred in order to complete their medical studies.

The recommendation was based on the understanding that an appropriate body be established in government to effect certain measures relative to the utilization of physicians by the medical departments of the Armed Forces.

These measures are:

1. That the induction of physicians into the Armed Forces be kept to the minimum needed to provide adequate medical service to the personnel of these forces.
2. That appropriate consideration be given to current and potential needs of the civilian population for medical services.
3. That in calling civilian physicians, including reserve officers, for military service the following priorities be observed:
 - a. Those physicians who were permitted to pursue their medical education during World War II and who did not serve as medical officers.
 - b. Those physicians who were below the Selective Service age during World War II
 - c. Those physicians who graduated prior to World War II but did not serve with the military services during the last war and those physicians who had service as medical officers but entered service subsequent to V-J Day.
 - d. Those physicians who served the least time in World War II during active hostilities.

While the Association's Military Service Committee has not established any priorities at the time of going to press, it is assumed that as such priorities are established, they will be along the line as accepted by the A.M.A.

MILITARY SERVICE COMMITTEE QUESTIONNAIRE RETURN PROMPT

All physicians in the State of Oklahoma, irrespective of whether they are members of the Oklahoma State Medical Association, have received an extensive questionnaire from the Military Service Committee.

The questionnaire, which was designed to give a complete analyses of the physicians' background, dependency status, and past military service records, has had a phenomenal response from the physicians of the state. Although the questionnaire was mailed during summer months when many physicians were on vacation, more than 50 per cent of the questionnaires have been returned to the Committee.

The study which will be made from the questionnaires will be the basis on which the Committee will know the number of physicians in the state who have served in previous military engagements or who are available for military service should a priority system be established.

VETERAN PHYSICIANS ORGANIZE

Physicians of the state of Oklahoma who served in any previous military engagement of the United States, organized during the Annual Meeting by electing Paul Gallaher, M.D., Shawnee, President; Ralph Hubbard, M.D., Oklahoma City, Vice-President; Shade Neely, M.D., Muskogee, President-Elect; and Johnny Blue, M.D., Oklahoma City, Secretary-Treasurer. The name of the organization is the Oklahoma Physicians Veterans Association.

The association has as its aims and purposes the following:

1. To stimulate good will and fellowship among those physicians who have served in the military forces and with the profession and public at large.

2. To encourage eligible physicians to associate with the recognized veterans organizations.

3. To promote Americanism in all of its aspects and to oppose socialization.

4. To recommend and act in an advisory capacity with the armed forces in the utilization of medical and allied manpower to the end that there shall be no wastage of these highly specialized and necessary services.

5. To consult and advise with all agencies of the government and voluntary organizations, in the event of another cataclysmic disaster.

6. To seek clarification in the minds of the public, veterans organizations, and the medical profession of the functions and limitations of veterans hospitals to the end that these facilities will render maximum medical and hospital care for veterans with service connected disabilities.

7. To promote and plan with other agencies for the protection of the health and welfare of all communities and individuals against any form of disaster.

8. To cooperate with any other like organizations that may be organized or exist in other states with the same or similar aims and purposes.

Any physician desiring to become a member of the organization should immediately contact Doctor Blue, 506 Hales Building, Oklahoma City.

DOCTOR NORTHCUTT PRESENTED GAVEL

Clarence E. Northcutt, M.D., former President of the Oklahoma State Medical Association was presented with a gavel, suitably engraved, as Past President of the Conference of Presidents at the American Medical Association meeting in San Francisco.

Former mayor of Ponca City, Past President of his local Chamber of Commerce, and Kiwanis Club, Doctor Northcutt was named by the people of his home city as their "Most Useful Citizen" 17 years ago.

PHYSICIANS VETERANS ASSOCIATION RELEASES INFORMATION ON PRESENT SERVICE RECORDS OF PHYSICIANS

The newly created Oklahoma Physicians Veterans Association in a recent statement to the press stated a survey of its membership showed the following:

1. Out of approximately 1700 practicing physicians in Oklahoma, over one-third are veterans of either World War I or World War II.

2. The average length of time in service per doctor was 40 months.

3. More than two-thirds of these physicians saw overseas duty.

4. The average length of time spent overseas was 30 months.

5. The average age of these same doctors now is 39 years.

The organization also pointed out that the medical departments of the military forces should survey their utilization of medical manpower in light of the experience gained in World War II and recommended that the medical departments of the army and navy consider the following:

1. That there should be no waste in medical manpower as was the case in the last war.

2. That men of military age deferred in World War II for the purpose of completing their medical education at the expense of the government and who are not now available for call to service be first to go to active duty. Many of these are single and without dependents.

3. That men who did not serve in the last war due to some minor disability, but remained at home, should be called on to serve.

4. That all physicians be registered with selective service irrespective of age and physical condition and that all physicians be made available for military duty with selective service utilizing the advice of the medical profession concerning withdrawal from civilian life for military duty, in order that civilians, hospitals and medical education be adequately provided with medical personnel.

That physicians be called for military duty in the following order, unless they desire active duty:

Physicians trained at government expense with no active military duty.

Physicians with minor defects and those who did not serve in the last war due to dependents, etc.

Next should come physicians according to the time served in the last war, with overseas duty counting in this exemption.

That medical doctors not be assigned to non-medical tasks.

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COLLEGE OF PHYSICIANS TO MEET IN TULSA

Program has been announced for the Oklahoma-Arkansas Regional Meeting of the American College of Physicians set for September 30, 1950 at the Mayo Hotel, Tulsa, Oklahoma. Below is the complete program for the meeting.

9:00 Registration

9:45 Welcome

MORNING SESSION

Presiding, Dr. Emory G. Hyatt, Fellow,
Tulsa, Oklahoma

10:00 Recent Advances in the Diagnosis and Treatment of Cerebral Vascular Disease
Dr. R. E. Carpenter, Associate, Oklahoma City, Oklahoma

10:15 Relationship of Vitamins to Disease
Dr. Paul Day, Professor of Chemistry, University of Arkansas (by invitation)

10:30 Anterior Pituitary Insufficiency
Dr. Paul Strong, Associate, Tulsa, Oklahoma

10:45 Pulmonary Emphysema, A Diagnostic and Therapeutic Problem
Dr. John J. Donnell, Associate, Oklahoma City, Oklahoma

11:00 What's New in Medicine
Dr. Howard C. Coggeshall, Fellow, Dallas, Texas
Dr. Arthur A. Hellbaum, Professor of Pharmacology, University of Oklahoma School of Medicine (by invitation)

11:45 Intermission

12:00 PANEL: Gastro-Intestinal Diseases
Dr. Wynn Langston, Fellow, Oklahoma City, Oklahoma, Moderator
Dr. Walter L. Palmer, Fellow, Chicago, Illinois
Dr. Jerome S. Levy, Fellow, Little Rock, Arkansas
Dr. S. C. Shepard, Fellow, Tulsa, Oklahoma
Dr. Harry A. Daniels, Fellow, Oklahoma City, Oklahoma

1:00 Intermission, Luncheon

AFTERNOON SESSION

Presiding, Dr. Arless A. Blair, Fellow,
Governor for Arkansas,
Fort Smith, Arkansas

2:00 Steroids Other than ACTH and Cortisone in the Treatment of Rheumatoid Arthritis
Col. Ralph Patterson, Army and Navy Hospital, Hot Springs, Arkansas (by invitation)

2:15 Diseases of the Esophagus
Dr. Bert E. Mulvey, Fellow, Oklahoma City, Oklahoma

2:30 Pulmonary Silicosis
Dr. H. A. Brocksmith, Medical Consultant, Muskogee Veterans' Hospital, Muskogee, Oklahoma (by invitation)

2:45 Role of Potassium in the Body
Dr. John B. Morey, Fellow, Ada, Oklahoma

3:30 ADDRESS

Dr. Walter L. Palmer, Fellow, Chicago, Illinois

3:30 Intermission

3:45 Modern Concepts of Hepatitis in Cirrhosis
Dr. Alfred Kahn, Little Rock, Arkansas (by invitation)

4:00 Clinical Pathological Conference
Dr. Leo Lowbeer, Tulsa, Oklahoma, Pathologist, Hillcrest Hospital, Tulsa, Oklahoma (by invitation)

Dr. Robert H. Bayley, Fellow, Oklahoma City, Oklahoma, Professor of Medicine, University of Oklahoma School of Medicine.

HOSPITAL BEDS AVAILABLE FOR POLIO PATIENTS

Oklahoma Polio Advisory Committee has requested that the Journal publish a list of state hospitals which are accepting patients suffering from acute poliomyelitis. The Advisory Committee reminds physicians, however, that the facilities of these centers are limited in scope and that no patient should be sent to any of the hospitals listed below until it is definitely established that a vacant bed exists. Hospitals accepting polio patients (children and adults) are:

Benedictine Heights Hospital, Guthrie

Bone and Joint Hospital, Okla. City

Community Hospital, Elk City

Hillcrest Memorial Hospital, Tulsa

Oklahoma Hospital for Crippled Children, Okla. City

St. John's Hospital, Tulsa

St. Mary's Hospital, Enid

In addition to the above hospitals, the following institutions have indicated that they would accept acute polios should the disease reach epidemic proportions, or that they were making plans to do so in the future:

Ardmore Sanitarium and Hospital, Ardmore

Guymon Municipal Hospital, Guymon

LeFlore County Memorial Hospital, Poteau

Muskogee General Hospital, Muskogee

Oklahoma Baptist Hospital, Muskogee

Shawnee Municipal Hospital, Shawnee

Valley View Hospital, Ada

Western Oklahoma State Hospital, Clinton

Stillwater Municipal Hospital, Stillwater

Chickasha Hospital and Clinic, Chickasha

El Reno Sanitarium, El Reno

KANSAS CITY CONFERENCE ANNOUNCES SPEAKERS

Guest speakers for the 28th Annual Fall Clinical Conference of Kansas City have been announced. Dates for the meeting have been set for October 2, 3, 4 and 5, 1950.

Speakers are Joseph S. Barr, M.D., Clinical Professor, Orthopedic Surgery; Brian B. Blades, M.D., Professor, Surgery; Edward W. Boland, M.D., Asst. Clinical Professor, Medicine; William L. Bradford, M.D., Professor, Pediatrics; Edwin N. Broyles, M.D., Associate Professor, Otolaryngology; Paul R. Cannon, M.D., Professor and Chrm., Dept. of Pathology; Bayard Carter, M.D., Professor, Obstetrics and Gynecology; Arthur Grollman, M.D., Professor, Medicine, and Chrm., Dept. Exp. Med; Elmer Hess, M.D., Director, Hess Urological Clinic;

Charles L. Martin, M.D., Professor, Radiology; Alton Ochsner, M.D., William Henderson Professor and Head of Dept., Surgery; Herman E. Pearse, M.D., Professor, Surgery; F. E. Seneor, M.D., Professor and Head of Dept., Dermatology; Dwight L. Wilbur, M.D., Professor and Head of Dept., Dermatology; Dwight L. Wilbur, M.D., Assoc. and Clinical Professor, Medicine; Irving S. Wright, M.D., Professor, Clinical Medicine;

Clem Whitaker, Director, and Leone Baxter, General Manager, National Education Campaign of the American Medical Association.

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septicemia, boutonneuse fever, brucellosis, chancroid, Friedländer infections (*Klebsiella pneumonia*), gonorrhea (resistant), Gram-negative infections (including those caused by some of the coli-aerogenes group), Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, peritonitis, pertussis infections (acute and subacute), primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, sinusitis, subacute bacterial endocarditis resistant to penicillin, surgical infections, tick-bite fever (African), tularemia, typhus and the common infections of the uterus and adnexa.

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.

Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

BOOK REVIEWS

MEDICINE THROUGHOUT ANTIQUITY. Benjamin Lee Gordon, M.D. Philadelphia. F. A. Davis Company. 1949.

It is impossible to convey in a few words the significance of this theme so eloquently propounded in scholarly terms by the author. This interesting volume covering 840 pages, effectively exhibiting 157 illustrations, carries the reader through three periods of ancient medicine, the first reaching back to that illy defined stage of man's existence when through some unknown process intelligence arose to supplement instinct in pursuit of logical therapy. The second or protohistoric period, marked by an actual recording of man's primal sympathy for man and expressed through the obvious evidence of a social consciousness represented the therapeutic application of medical knowledge for mutual defense; the third, or rational period, paralleling and influencing the Greek period of enlightenment was characterized by the "sleepless, critical spirit" of investigation initiated the Greek physicians. This intellectual and scientific force was destined to survive the Roman conquest of Greece and to keep alive during the period of Roman supremacy the spirit of scientific investigation and its recording for posterity. The third or Greco-Roman period, ends with the fall of Rome 476 A.D. So ends this interesting and important story of ancient medicine presented by Doctor Gordon.

Those who are too indolent or too indifferent to fortify the present and to anticipate the future by a look at the past may be shamed by the author's citations from Hippocrates and Cicero. Hippocrates said:

"I do not say that the old art of healing should be abandoned as of no account as though its investigations were wrongly conducted; on the contrary I maintain that its way of thinking came so near the truth that one should take it more into consideration and wonder at the discoveries made in spite of so great a lack of knowledge."

Cicero perhaps influenced by the great Hippocrates stated:

"Not to know what has been transacted in former

times is to continue always a child; if no use is made of the labors of the first ages, the world must remain always in the infancy of knowledge."

The physician who doesn't condition his acceptance of the present by what has gone before and predicate his anticipation of the future upon a knowledge of the past is destined to remain in professional childhood. This book, representing an historical record of the first glimmering rays of medical science, revealing the ever increasing glow of dawning knowledge until the golden thread of truth was submerged by Roman stupidity, should be read by every physician regardless of his field of medical endeavor.

It is unworthy of the true physician to profit by modern medicine, the greatest triumph of the human mind, without knowing something of its source, its course and its ultimate consummation.

The book is redolent with the author's erudition, as he presents the evolution of medical science and its relation to ancient culture.—Lewis J. Moorman, M.D.

CURRENT THERAPY 1950. Edited by Howard F. Conn, M.D. with 12 consulting authors. Philadelphia. W. B. Saunders Company. 1950.

This well edited, comprehensive work on therapy containing contributions from more than 250 outstanding American physicians, serving under the editor, Howard F. Conn, and a board of 12 distinguished consultants should be of great service to the busy physician who wants to know what is therapeutically standard, what is new and how administered.

It is a large well indexed volume containing 736 pages of valuable information with detailed instructions. To further facilitate its ready use the diseases and conditions requiring therapeutic attention are divided into 15 sections. This work should be of genuine service to the busy doctor who wishes to know the latest approved therapy in any given case or needs to recall a drug and its dosage or to employ one of the many new therapeutic agents now available. In view of recent progress in this field such a book should be invaluable.—Lewis J. Moorman, M.D.

MEET OUR CONTRIBUTORS

Joseph W. Gale, M.D., Madison, Wisconsin, guest speaker at the 1950 Annual Meeting, has a paper on "The Crippled Lung" in this issue of the Journal. Doctor Gale was graduated from Washington University School of Medicine, St. Louis, Mo., in 1924. His specialty is general and thoracic surgery. Certified by the American Board of Surgery and the Board of Thoracic Surgery, Doctor Gale is a member of the American Surgical Association, Western Surgical Association, Central Surgical Association, American Association for Thoracic Surgery, Society of University Surgeons, American College of Surgeons, and American Trudeau Society. He is a member of the scientific council of his State Medical Society. Doctor Gale practiced in St. Louis, Mo., before moving to Madison.

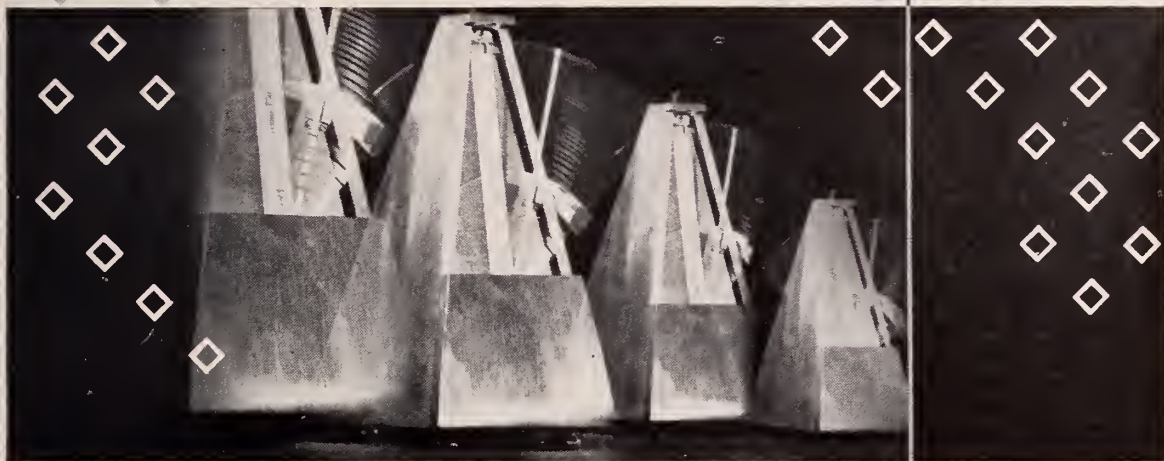
Albert N. Lemoine, Jr., M.D., another guest speaker at the Annual Meeting, is the author of the paper on "Differential Diagnosis of a Red Eye". Doctor Lemoine, who is from Kansas City, Missouri, specializes in ophthalmology and has been certified by that board. He was graduated from Washington University School of Medicine in 1943. Doctor Lemoine is a member of

the American Academy of Ophth. and Oto., Association for Research in Ophthalmology, and the Kansas City E.E.N.T. Society.

Charles A. Royer, M.D., Oklahoma City, wrote "Indications for, and Results of Keratoplasty" in this issue. A graduate of the University of Kansas in 1932, he limits his specialty to ophthalmology. He has been certified by the American Board of Ophthalmology and is a member of the American Academy of Ophthalmology and Otolaryngology. He practiced in Alva before coming to Oklahoma City.

E. N. Robertson, A.B., M.D., Oklahoma City, has an article on "Goniotomy in Congenital Glaucoma" in this Journal. A 1937 graduate of Washington University in St. Louis, he limits his practice to ophthalmology. He has been certified by the American Board of Ophthalmology and is a member of the American Academy of Ophthalmology and Otolaryngology. Previously he practiced in St. Louis, Mo. and Concordia, Kans. and was secretary of Cloud County, Kans. county society.

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HAVE YOU HEARD?

H. W. Wendelken, M.D., Miami, has been elected chairman of the Ottawa County Red Cross chapter for 1950-51.

R. C. Meloy, M.D., Claremore, was a recent guest speaker at the regular luncheon meeting of the Wagoner Rotary Club.

Jack W. Myers, M.D., El Reno, was featured in his home town paper recently as one of the outstanding citizens of El Reno.

Phillips Fife, M.D. and *Elton LeHew, M.D.*, recently held open house in their new clinic at 311-313 East Oklahoma, Guthrie.

Denny H. Cramblet, M.D., a graduate of St. Louis University Medical School is now practicing in Stigler.

Glen Berkenbile, M.D., a graduate of the University of Oklahoma School of Medicine, is now associated with the McCurdy Hospital and Clinic in Purcell.

Joseph Fulcher, M.D., Tulsa, is building a new urological clinic at the northeast corner of Twelfth Street and Peoria Avenue in Tulsa.

Tulsa's new Utica Square Medical Center just south of St. John's Hospital will be ready for occupancy within this year. A 10 story building for physicians and dentists, office space is available in multiples of four feet and partitions will be placed in the suites according to tenant specifications.

C. E. Smith, M.D., Henryetta, attended the Lion's National Convention in Chicago.

Marie Lane, M.D., is now associated with her husband, *Wilson H. Lane, M.D.*, in practice in Britton.

Elizabeth Chamberlain, M.D., Bartlesville, was guest speaker at a recent Kiwanis Club meeting in Bartlesville. Doctor Chamberlain spoke on her recent trip to Brazil.

Robert Meiers, M.D., is chairman of the Crippled Children's Committee of the Sayre Rotary Club.

A. B. Colyar, M.D., who has been director of the Pittsburg County Public Health Department since January, 1949, has resigned to do additional work in public health and hygiene at Johns Hopkins.

O. W. Starr, M.D., Drumright, was featured in a story in his home town paper on his 35th anniversary of the date he established practice in Drumright.

Roy Donaghe, M.D., formerly with Crippled Children's Hospital in Oklahoma City, has been appointed city-county health director in Lawton to succeed *Charles E. Green, M.D.*, who has accepted a position as state pediatric consultant to the Oklahoma State Health Department.

Richard W. Loy, M.D., has joined the Loy-McDonald Clinic in Pawhuska.

F. W. Rogers, M.D., Carnegie, has recently remodeled his offices.

ANNOUNCEMENTS

BASIC SCIENCE BOARD. Date for examinations to be given by the board has been set for September 15, 1950 at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma. Registration will begin at 7:30 a.m.; examinations will begin at 8:00 a.m.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1 and 2, Oklahoma City.

POSTGRADUATE COURSES IN ANESTHESIOLOGY, PSYCHOSOMATIC MEDICINE. Anesthesiology, September 18, 19 and 20, 1950. Psychosomatic Medicine October 30—November 1, 1950. University of Kansas School of Medicine, Kansas City 3, Kansas.

SOUTHWESTERN SURGICAL CONGRESS. September 25, 26, 27, 1950. Denver, Colorado. For additional information write 632 Republic Building, Denver 2, Colorado.

NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS. Annual Convention, October 26, 27 and 28, 1950. Stevens Hotel, Chicago.

AMERICAN COLLEGE OF PHYSICIANS. Thirty-second Annual Session, April 9, 13, 1951. St. Louis, Missouri.

NORTH TEXAS-SOUTHERN OKLAHOMA FALL CLINICAL CONFERENCE. September 20, 1950, Wichita Falls, Texas. Registration fee \$7.00 includes meals. Hotel reservations may be obtained by writing E. A. Cox, M.D., 203 Hamilton Building, Wichita Falls, Texas.

DALLAS SOUTHERN CLINICAL SOCIETY. Fall and Winter Conferences in Gastro-Enterology, General Surgery, Cardiology, Obstetrics-Gynecology. See additional information page 432.

AMERICAN UROLOGICAL ASSOCIATION. Annual award of \$1000 with first, second and third prizes of \$500, \$300, and \$200 for essays on the result of some clinical or laboratory research in urology will be presented at the Chicago meeting at the Palmer House, May 21, 22, 23, 24, 1951.

SOUTHERN MEDICAL ASSOCIATION. November 13-16, 1950, St. Louis, Mo. For reservations address the Housing Bureau, Southern Medical Association, 911 Locust Street, Room 406, St. Louis 1, Mo. No hotel will be designated as general hotel headquarters as all meetings and scientific and technical exhibits will be held in Kiel Municipal Auditorium.

KANSAS CITY FALL CLINICAL CONFERENCE. 28th Fall Clinical Conference will be held October 2, 3, 4, 5, 1950 at Kansas City, Missouri.

ARTHRITIS AND RHEUMATISM FOUNDATION. Research fellowships for research in the basic sciences related to the study of arthritis are being offered by that foundation. These fellowships carry a stipend of from \$4,000 to \$6,000 beginning in July, 1951. Applications should be sent to the Arthritis and Rheumatism Foundation, 535 Fifth Avenue, New York 17, N. Y. by Jan. 1.

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MEDICAL ABSTARCTS

ROBERT M. BECKER, M.D.

THE LEVEL OF THE CIRCULATING EOSINOPHILES FOLLOWING TRAUMA. Gabrilove, J. L. (Mt. Sinai Hosp., N.Y.C., N.Y.) *Endocrinology* 10:637, June, 1950.

Total eosinophile counts were done on patients following surgery, coronary occlusion, fever, and following the administration of pituitary ACTH (adrenocorticotropin), cortisone (adrenal cortex Comp. E) and testosterone.

The results (a fall in circulating eosinophiles in all patients except those receiving testosterone) indicate an increased output of cortisone or cortisone-like steroids by the adrenal cortex after bodily stress or trauma.

THE COLOR OF BLOOD-CONTAINING FECES FOLLOWING THE INSTILLATION OF CITRATED BLOOD AT VARIOUS LEVELS OF THE SMALL INTESTINE. Hilsman, J. H. (Dept. Med., Hosp. of Univ. Penn., Phil., Pa.) *Gastroenterology* 15:(No. 1): 131, May, 1950.

The author reports that when blood is introduced into the small intestine at various levels, the color of the stools, whether red or tarry, depends primarily on the length of time the blood remains in the small bowel rather than the level at which the blood was introduced. Hyperperistalsis and diarrhea will produce a red stool although the blood came from a relatively high location in small bowel. He suggests that these studies indicate that the mechanism for changing the color of the blood from red to black operates orad to the ascending colon, probably in the small bowel.

MORTALITY IN HOMOLOGONS SERUM HEPATITIS. Steele, H. H. (Dept. Med. H. Ford Hosp., Detroit) *Gastroenterology* 15 (No. 1): 59, May, 1950.

Mortality rates of 26 cases of homologons serum jaundice were compared with 63 cases of acute infections (epidemic) hepatitis. The death rate of 34 per cent in the homologons serum group as compared to 4.8 per cent in the epidemic hepatitis group clearly indicates how much more serious is the problem of homologons serum hepatitis than that of epidemic hepatitis. The author points out that those pa-

tients who acquired homologons serum hepatitis were as a whole a sicker group of patients to begin with as indicated by their need for plasma or whole blood transfusions which represented their source of infection. He reports that sterilization of plasma or whole blood with nitrogen mustard (HN_2 — Merck & Co.) renders them free of the infecting virus agent. This valuable and inexpensive procedure was first reported by Hartman and his associates (*Proc. Soc. Exp. Biol. & Med.*, 70:248, Jan.-Apr., 1949).

ALTERATIONS IN COLONIC FUNCTION IN MAN UNDER STRESS (IV: HYPO-MOTILITY OF SIGMOID COLON, AND ITS RELATIONSHIP TO THE MECHANISM OF FUNCTIONAL DIARRHEA). Almy, T. P., Abbot, F. K., and Hinkle, L. E. (Cornell Univ. Med. College, New York Hosp., N.Y.C.) *Gastroenterology* 15 (No. 1): 95, May, 1950.

Eighteen patients with "irritable colon" were studied by kymographic methods of motility of the sigmoid colon. Associated with changes in the patients' moods, there was noted "a sudden and marked reduction in tone and wavelike motility" which persisted for periods of 1-37 minutes. The authors conclude that these reactions (self reproach, hopelessness, inadequacy and crying) under stress could produce functional diarrhea through the mechanism of hypotonus of the sigmoid colon.

PENICILLIN TREATMENT OF PATIENTS WITH CARDIOVASCULAR SYPHILIS IN CONGESTIVE FAILURE. Edeiken, J., Ford, W. T., Falk, M. S., and Stokes, J. H. (Inst. Study Venereal Disease, Univ. Penn., Phil., Pa.) *Circulation* 11:355, June, 1950.

After observing results of treatment of 12 patients with syphilitic cardiovascular disease in congestive failure, the authors conclude that these patients responded better to routine congestive failure treatment combined with parenteral penicillin, than to the congestive failure treatment alone. Penicillin anti-luetic therapy was started with small doses of 500-50,000 units (crystallin Penicillin G), with total doses of 4.8-9.6 million units.

CLASSIFIED ADS

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MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

"Let's Avoid Polio Panic" — Victor Cohn — *Woman's Home Companion*, August, 1950.

Whenever poliomyelitis strikes a community the health department finds itself faced with two epidemics — one of polio, the other of hysteria. Polio is a serious disease and proper precautions are essential. But the annual summer scare is both needless and harmful, writes Victor Cohn in his August *Woman's Home Companion* article, "Let's Avoid Polio Panic".

Today thousands of parents and children suffer from polio jitters which gradually are changing America's pattern of summertime living without affecting polio one way or the other, the author warns. Not only are health officers frequently forced to adopt measures which they realize will have little if any effect in controlling the disease, but must neglect public health problems of far greater importance.

We need to face the fact, experts told Cohn, that polio diagnosis is now so efficient that we are going to have what will seem a lot of polio almost every season. We need to learn to live with this fact.

One major cause of polio panic is the often heard statement that "polio is getting commoner". However, there is good reason to believe that this is not true. Polio is *not* more common but is more often diagnosed as such and more often reported to authorities than it used to be.

For instance, the article points out, in the heavy epidemic year of 1916 only the severe paralytic cases were diagnosed and reported and probably some of those went unnoticed. Today reports are made of thousands of light attacks — headache, ill-feeling, fever and the like. Moreover, the discovery in 1948 of a mock polio virus makes "epidemic" figures more uncertain than ever.

The real threat of polio — as against polio panic — also diminishes when it is compared with other diseases. In 1946 — the most recent heavy polio year for which complete figures exist — polio was responsible for 1,845 deaths. It ranked 42nd on the list of leading causes of death.

Not only does polio panic curtail the efficient operation of health departments, but it seriously undermines the emotional stability of children. One doctor reported: "All youngsters in our block are talking polio. Maybe we're creating 20 neurotics for every polio victim."

But insurance salesmen do not like to play it down as they would rather play it up to sell polio insurance. It is easily sold and a great share of the premium goes for salesmen commissions and the companies like it because there is good profit considering the relatively few cases on which they have to pay.

Other advertisers use the disease, too. "You Can Help Fight Polio" shrieked scare ads for one brand of fly spray (Scientists consider the fly's role in polio highly uncertain.)

But who has helped this scare campaign more than publishers, newspaper and magazines in other articles.

"If Noise Gets on Your Nerves" — Phoebe Rodcliffe — *Woman's Home Companion* — August, 1950.

It took the reading of this magazine to do it but I've finally found out why so many women are neurotic. For married women it is the constant whirl of all the mechanical gadgets in the house and kitchen especially, daytime radio serials combined with the kids screaming. In the country they don't have quite such "modern" kitchens, plus the fact the kids have a square mile in which to yell and not just a few square feet.

This article is trying to build up pressure for an anti-noise campaign by telling what excessive noises can do to your health. That is all good but apparently the politicians campaigning for election hadn't read it. Think maybe they'll read it before the November election?

"Is Your Doctor a Quack?" — Clive Howard — *Redbook*, July, 1950, page 26. This is a fairly well written article concerning mostly the Grievance Committees' set-up and their work. He isn't very well posted because he named only four states that had these committees and Oklahoma wasn't listed. We have had such a committee for two years.

One thing in particular I didn't see in the article was any discussion of the cults and their brand of quackery.

Stating that only one to three per cent of the profession are quacks, the author says, "If only one doctor in a hundred is a backslider, or even two or three, this is probably fewer black sheep than will be found in business or in law. Yet since doctors deal with human lives the figures are nevertheless frightening." Now why in heck should a man be excused for being a no count so and so with his fellow man just because directly life isn't affected. Crooked business deals have killed people and a shyster has lost people's life and property but so what.

"The Crucial Years for Women" — F. S. Edsall — *Coronet*, August, 1950, page 92. Put this article in every prescription of Stilbestal. It will do a great deal of good. To me it is a pretty well down to earth comment for both men and women and one that can do a whale of a job for a great many people. We doctors may not take the time to discuss such problems with patients and yet it is sorely needed by the individual.

"Psychoneurosis" — Maxine Davis — *Good Housekeeping* August, 1950, page 13. This is a three part course in psychiatry by that prolific writer. Seems to be copied from a textbook on psychiatry and 99 per cent of the people won't wade through it and 50 per cent of those who read it to the end won't understand it. After reading it through I'm in a state of confusion. If you can't understand the above, *you* read the article and join in my confusion. Time for me to read Little Abner.

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1. *Withering, W.*: An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.*: Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. 209: 33-41 (Jan.) 1945.

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O.S.M.A.—A.M.A. ROSTERS AVAILABLE

Copies of the 1950 Directory of the Oklahoma State Medical Association have been mailed to all members of the State Medical Association. Physicians who have not received a copy of the Directory are asked to notify the Executive Office, 1227 Classen, Oklahoma City.

The new Directory contains an alphabetical listing of physicians with members of the Association listed in solid capital letters and non members in lower case. Physicians are also listed alphabetically by counties.

In addition to the rosters in the Directory, much valuable information appears explaining the work and departments of the Oklahoma State Medical Association, private health and welfare agencies and governmental health and welfare agencies.

A.M.A. DIRECTORY

After three years of work, the 18th edition of the A.M.A. Directory has been completed and copies are now being shipped to subscribers. The long interval of eight years between the new Directory and the previous one made it necessary to set type on the entire book. The loss of experienced clerical help during the war, labor conditions and printing difficulties also contributed to the delay. The new directory contains 2,913 pages and lists information on 219,677 physicians in the United States, its dependencies, and Canada, also American graduates and licentiates located temporarily abroad.

The new Directory costs \$25. Orders can be placed by writing to Frank V. Cargill, Directory Department, American Medical Association, 525 North Dearborn St., Chicago (10) Ill.

OBITUARIES

N. L. CORNWELL, M.D.
1876-1950

N. L. Cornwell, M.D., Coyle, Oklahoma, died May 7 following a long illness. Born in New York in 1876, he graduated from medical school there and came to Oklahoma in 1907, having practiced medicine previously in New York and Michigan. Before coming to Coyle, he practiced in Meridian, Logan County, for 30 years.

E. R. WEAVER, M.D.
1860-1950

E. R. Weaver, M.D., pioneer Oklahoma and Arkansas physician died following a fall June 24. Doctor Weaver had lived in Bristow after his retirement several years ago. He was born in 1860.

SAMUEL ALEXANDER JONES, M.D.
1867-1950

Samuel Alexander Jones, M.D., died July 4 in a Bartlesville hospital.

Doctor Jones was born near Champaign, Ill. Jan. 7, 1867, where he was reared and educated. After receiving his B.S. degree, he entered the medical school at Memphis, Tenn. Practicing medicine in St. Louis for several years, he later moved to Indian Territory and practiced in Wooster until his retirement when he moved to Ramona 13 years ago.

The
**DALLAS SOUTHERN
CLINICAL SOCIETY**

Medical Arts Building
Dallas 1, Texas

Announces

FALL AND WINTER
POSTGRADUATE CONFERENCES
as follows:

GASTRO-ENTEROLOGY
GENERAL SURGERY
CARDIOLOGY
OBSTETRICS-GYNECOLOGY

- Sept. 11-13. GASTRO-ENTEROLOGY
Dr. Joseph B. Kirsner, Chicago, guest speaker
- Oct. 9-11. GENERAL SURGERY
Dr. Gilbert O. Dean, Little Rock, guest speaker
- Nov. 13-15. CARDIOLOGY
Dr. C. Sidney Burwell, Boston, guest speaker
- Jan. 8-10. OBSTETRICS-GYNECOLOGY
- Guest to be announced at a later date.

I wish to attend the _____ post-graduate conference _____ and enclose my check for \$25.00 which will be refunded if the course is filled.

_____, M. D.

I am a member of the _____ County Medical Society.

OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES

OKLAHOMA STATE MEDICAL ASSOCIATION

June 4, 1950

Oklahoma City, Oklahoma

MINUTES OF THE SECOND SESSION

The meeting of the House of Delegates reconvened at 7:30 P. M. in the Mirror Room at the Municipal Auditorium and was called to order by the Speaker of the House, L. Chester McHenry, M.D. A. R. Sugg, M.D., Ada, Chairman of the Credentials Committee, reported a quorum was present.

The Speaker introduced Doctor H. E. Griffin, from Graham, Texas, Fraternal Delegate from the Medical Association of the State of Texas, who brought greetings from the Texas physicians to their colleagues in Oklahoma.

The Speaker asked the Vice-Speaker, A. R. Sugg, M.D., Ada, to take the Chair. Doctor Sugg read the nominations as made in the first session of the House of Delegates, which were as follows: L. C. McHenry, M.D., Oklahoma City, President-Elect; Malcom E. Phelps, M.D., El Reno, Vice-President; Maurice J. Searle, M.D., Tulsa, and A. R. Sugg, M.D., Ada, Speaker of the House; W. K. Haynie, M.D., Durant, Vice-Speaker of the House; James S. Stevenson, M.D., Tulsa, Delegate to the American Medical Association; Finis W. Ewing, M.D., Muskogee, Alternate Delegate to the American Medical Association.

It was *moved* by John Matt, M.D., Tulsa, that L. Chester McHenry, M.D., Oklahoma City, be elected by acclamation. Motion *seconded* by Marshall Hart, M.D., Tulsa. Motion *carried*. Doctor McHenry was elected President-Elect.

The Speaker, Doctor McHenry, resumed the Chair and called for a motion regarding the office of Vice-President. It was *moved* by John Matt, M.D. Tulsa, that Malcom Phelps, M.D., El Reno, be elected by acclamation. Motion *seconded* by Forrest Etter, M.D., Bartlesville. Motion *carried*. Doctor Phelps was elected Vice-President.

A motion was called for regarding the office of Delegate to the A. M. A. It was *moved* by Robert Funk, M.D., Tulsa, that Doctor James Stevenson, M.D., Tulsa, be elected by acclamation. Motion *seconded* by George Kaiser, M.D., Muskogee. Motion *carried*. Doctor Stevenson was elected Delegate to the A. M. A.

The Speaker called for a motion concerning the office of Alternate Delegate to the A. M. A. F. R. First, Jr., M.D., Checotah, *moved* that Finis Ewing, M.D., Muskogee, be elected by acclamation. Motion *seconded* by George Kaiser, M.D. Motion *carried*.

It was announced by the Speaker that the nominations for Councilors and Vice-Councilors would now be in order. The Speaker called for nominations from the First Councilor District. F. C. Lawrence, M.D., Bartlesville, nominated the following: Forrest S. Etter, M.D., Bartlesville, Councilor; J. E. Highland, M.D., Miami, Vice-Councilor. It was *moved* by Shade D. Neely, M.D., Muskogee, *seconded* by W. A. Howard, M.D., Chelsea, that these men be elected by acclamation. The motion *carried*.

District 4: L. R. Kirby, M.D., Cherokee, nominated O. C. Newman, M.D., Shattuck, as Councilor and Joe Duer, M.D., Woodward, nominated L. R. Kirby, M.D., as Vice-Councilor. It was *moved* by Ned Burleson, M.D., *seconded* by V. K. Allen, M.D., Tulsa, that these men be elected by acclamation. Motion *carried*.

District 7: James F. Hohl, M.D., Norman, nominated the following: Ned Burleson, M.D., Prague, Councilor; W. T. Mayfield, M.D., Norman, Vice Councilor. It was *moved* by Malcom Phelps, M.D., El Reno, that these men be elected by acclamation. The motion was *seconded* by several and *carried*.

District 10: T. H. McCarley, M.D., McAlester, nominated the following: E. H. Shuller, M.D., McAlester, Councilor; Paul Kernek, M.D., Holdenville, Vice-Councilor. It was *moved* by McLain Rogers, M.D., *seconded* by John R. Taylor, M.D., that these men be elected by acclamation. Motion *carried*.

District 13: H. H. Macumber, M.D., Chickasha, nominated the following: H. M. McClure, M.D., Chickasha, Councilor; J. B. Miles, M.D., Anadarko, Vice-Councilor. It was *moved* by E. T. Cook, Jr., M.D., Anadarko, *seconded* by Joe Duer, M.D., Woodward, that these men be elected by acclamation. Motion *carried*.

The Speaker announced that O. C. Standifer, M.D., Councilor from District 5 had resigned and asked for nominations for Councilor from that District. McLain Rogers, M.D., Clinton, nominated A. L. Johnson, M.D., El Reno, as Councilor, and Ross Deputy, M.D., Clinton, Vice Councilor in place of Doctor Johnson. It was *moved* by O. C. Standifer, M.D., *seconded* by P. E. Fry, M.D., that these men be elected by acclamation. Motion *carried*.

The Speaker called to the attention of the House of Delegates that at the afternoon session A. R. Sugg, M.D., of Ada and M. J. Searle, M.D., of Tulsa, had been nominated for Speaker of the House of Delegates. The Speaker requested the tellers to distribute ballots and stated that election was in order. After a vote by ballot a roll call vote was requested by Robert Funk, M.D., Tulsa, and following the roll call vote Doctor Sugg was declared elected Speaker of the House.

It was announced by the Speaker that by electing Malcom Phelps to Vice-President there was now a vacancy for the office of Alternate Delegate to the A. M. A. Nominations were declared open for Alternate Delegate. P. K. Graening, M.D., Oklahoma City, nominated Allen G. Gibbs, M.D., Oklahoma City. L. R. Kirby, M.D., Cherokee, nominated D. B. Ensor, M.D., Alva. Joe Duer, M.D., Woodward, nominated John Records, M.D., Oklahoma City. J. E. Highland, M.D., Miami, nominated M. J. Searle, M.D., Tulsa. Ned Burleson, M.D., *moved* nominations close, *seconded* by W. K. Haynie, M.D. Motion *carried*. On the third ballot M. J. Searle was elected Alternate Delegate to the A. M. A.

The Speaker asked for a motion regarding Vice-Speaker of the House. It was *moved* by W. W. Cotton, M.D., *seconded* by W. A. Howard, M.D., that W. K. Haynie, M.D., Durant, be elected by acclamation. Motion *carried*.

Nominations were called for from District 11, in view of the fact that Doctor Haynie, Councilor from this District, had been elected Vice-Speaker. Doctor A. T. Baker, Durant, was recognized and reported that he was the only Delegate present from his District but that he desired to make a nomination. The Speaker ruled Doctor Baker out of order inasmuch as the constitution and By-Laws provides that nominations must

be made by a caucus of the Delegates and that it was his opinion that one delegate could not hold such a caucus.

The Speaker further announced that in view of this situation that the President of the Association was empowered by the Constitution and By-Laws to appoint a Councilor to serve until the next election. Doctor Garrison appointed A. T. Baker, M.D., of Durant and such appointment was confirmed by the House of Delegates.

The Speaker asked for a nomination from the 5th Councilor District for a Councilor to fill the unexpired term of Doctor M. J. Searle, Tulsa, who had been elected Alternate Delegate to the A. M. A. Doctor Searle nominated V. K. Allen, M.D. *Motion made by Doctor Larrabee that he be elected by acclamation. Motion seconded and carried.*

The Speaker asked for action regarding the amendments to the By-Laws as submitted in the first session. It was *moved* by W. S. Larrabee, M.D., *seconded* by W. A. Howard, M.D., that the amendments be adopted as read. *Motion carried.*

The Speaker read the reports of the Committee on Necrology which was as follows:

The Committee on Necrology submits the following report to the House of Delegates:

Since the last Necrology report in May, 1949, the Almighty in his infinite wisdom has called from our midst 33 of our beloved friends and co-workers. While we bow in sorrow to the will of the Omiscience, we are appreciative of these wonderful men. Physicians, scientists, teachers and friends, and their far-reaching influence which will continue to inspire us to carry on our duties to Humanity.

THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association recognizes the demise of those former 33 fellow members and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association:

G. V. Dorsheimer	Dewey	March, 1949
Frank W. Boadway	Ardmore	April, 1949
G. H. Stagner	Edmond	April, 1949
O. O. Hammonds	Oklahoma City	May, 1949
Hugh L. Rains	Oklmulgee	May, 1949
C. E. Barker	Oklahoma City	June, 1949
John S. Rollins	Prague	July, 1949
William Jackson Sayles	Miami	August, 1949
A. B. Stephens	Seminole	August, 1949
Duke W. Vincent	Vici	September, 1949
Leon Janco	Oklahoma City	October, 1949
Charles D. Blachly	Oklahoma City	November, 1949
John C. Dovell	Padeu	November, 1949
D. E. Cantrell	Healdton	November, 1949
J. T. Frizzell	Clinton	December, 1949
Raymond W. Stouer	Checotah	December, 1949
Joseph H. Fulton	Atoka	January, 1950
J. T. Looney	Tishomingo	February, 1950
D. W. Miller	Blackwell	February, 1950
Harvey O. Randel	Oklahoma City	February, 1950
Walter W. Wells	Oklahoma City	February, 1950
W. H. Freeman	Sentinel	March, 1950
C. M. Maupin	Waurika	March, 1950
Alfred J. Metscher	Enid	March, 1950
Robert M. Alexander	Paoli	March, 1950
Vern L. Musick	Oklahoma City	March, 1950
E. A. Kelleam	Wright City	March, 1950
H. M. Reeder	Konawa	March, 1950
L. R. Pace	Seminole	April, 1950
Charles G. Price	Durant	April, 1950
T. A. Hill	Cleveland	June, 1950
J. W. Riley	Oklahoma City	June, 1950
Carl Brundage	Oklahoma City	June, 1950

Respectfully submitted,

P. P. Nesbitt, M.D., Tulsa, Chairman
George H. Niemann, M.D., Ponca City

The Speaker called for a report from the Resolutions Committee. Doctor Ralph A. Smith, Chairman, Oklahoma City, presented the following resolutions, each of which was adopted on motion duly made and seconded and unanimously passed.

RESOLUTION

A. M. A. to Support National Agencies Requesting Funds.

WHEREAS, State and County Medical Societies are constantly being contacted by National Organizations for financial support of their aims and objectives, and

WHEREAS, many of these requests are meritorious, and

WHEREAS, State and County Medical Associations do not have the facilities for proper investigations of these requests, and

WHEREAS, State and County Medical Associations do not have sufficient funds to support all requests for financial assistance, and

WHEREAS, beginning with the year 1950 the physicians of the United States who are members of the American Medical Association will pay dues to the American Medical Association and thus give the American Medical Association funds upon which to operate,

NOW THEREFORE BE IT RESOLVED, that the American Medical Association be requested to implement a method to evaluate these requests for financial assistance, and

BE IT FURTHER RESOLVED, that all requests of National Organizations for financial assistance when deemed meritorious be given financial assistance by the American Medical Association.

And that the State and County Medical Society be kept advised of such financial assistance in order that the State and County Medical Societies may better be able to ascertain whether or not they will give further financial assistance to such national organizations.

RESOLUTION

WHEREAS, as the Oklahoma State Medical Association is fully aware of the need for physicians for rural and general practice, and,

WHEREAS, The Medical School of the University of Oklahoma has seen fit to pioneer in the field of preceptorship for young physicians by placing them in rural communities for practical training, and

WHEREAS, this program should be given every encouragement possible in order that the people of Oklahoma in all areas may have the best medical care possible,

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association commend the Board of Regents of the University of Oklahoma, President of the University of Oklahoma, Dr. George L. Cross, and the Dean of the Medical School of the University of Oklahoma, Dr. Mark Everett, for this practical approach to a difficult social and economic problem and pledges the entire support of the Association to the end that this program may succeed to the fullest extent.

RESOLUTION

THE COMMONWEALTH FUND

The House of Delegates of the Oklahoma State Medical Association at its 57th Annual Meeting desires to go on record and express appreciation to the Commonwealth Fund of New York for its liberal financial support in making possible for a period of 12 years Postgraduate instruction to the physicians of Oklahoma.

Although the Commonwealth Fund will no longer contribute financially to the support of the Postgraduate

program a sense of deep gratitude for its assistance, both financial, moral and administratively in bringing about postgraduate education in Oklahoma is gratefully acknowledged and appreciated.

RESOLUTION

WHEREAS, Continuing medical education for the Doctors of Medicine in the State of Oklahoma is the ultimate benefit of all of the people of the state, and

WHEREAS, The Oklahoma State Medical Association has, for many years, received the wholehearted aid and assistance of the Oklahoma State Health Department in the operation of its Postgraduate training program, and

WHEREAS, the operation of this extensive postgraduate training program might not be possible without the cooperation of the State Health Department, and would be a greater financial burden both on the Association and upon the individual doctors enrolled,

NOW THEREFORE BE IT RESOLVED, That the House of Delegates, at its 57th Annual Meeting in Oklahoma City, Oklahoma, this 4th day of June, 1950, express to the State Health Department its gratitude and commendation for its worthwhile participation in the Postgraduate training program and,

BE IT FURTHER RESOLVED, that copies of this resolution shall be directed to the Chairman of the State Board of Health and to the Commissioner of Public Health.

RESOLUTION

WHEREAS, During the past year the Woman's Auxiliary to Oklahoma State Medical Association has increased the number of its component County and District Auxiliaries to 35 and

WHEREAS, The officers and the members of the Auxiliary have given generously and tirelessly of their time and talents to support every project of Oklahoma State Medical Association, and

WHEREAS, The work of the Auxiliary membership in carrying out the plans of the American Medical Association National Education Campaign has been particularly outstanding, and

WHEREAS, The defeat of proposals for compulsory health insurance, which is the aim and objective of the National Education Campaign, will help to wipe out the creeping paralysis of Socialism in this country,

NOW THEREFORE BE IT RESOLVED, That Oklahoma State Medical Association expresses to the Woman's Auxiliary its appreciation for its invaluable service in the present critical period, not only to the profession of medicine, but also to all Americans who want their children to receive the same heritage of glorious freedom which was handed to us by our forefathers.

RESOLUTION

WHEREAS, every practicing member of the medical profession recognizing the contribution to the efficiency of his practice which is made by the assistants in his office, and,

WHEREAS, his assistants must be prepared at all times to deal tactfully and diplomatically with the peculiarities and complaints of his patients and his own foibles, and,

WHEREAS, the work is in every detail strenuous and exacting, and,

WHEREAS, The Medical Assistants Society composed of this group of well-trained willing co-workers have organized themselves together for the purposes of improving their own efficiency and their value to the Doctors of Medicine with whom they work,

NOW THEREFORE BE IT RESOLVED, that the Oklahoma State Medical Association express to the Medical Assistants Society its gratitude for their efforts on the doctors' behalf both individually and as a group.

RESOLUTION

WHEREAS, The Medical Service Society, composed of representatives of pharmaceutical and biological houses, has rendered a great service to the medical profession of this state, and

WHEREAS, the Medical Service Society is at all times ready and willing to accept its responsibilities in bringing about a better understanding and cooperation between the medical profession and the representatives of their companies, and

WHEREAS, the Medical Service Society has made an outstanding contribution both financially and otherwise to the Medical Research Foundation,

NOW THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association commends the Medical Service Society for its outstanding achievements and assures the Medical Service Society of the continued good will of the Oklahoma State Medical Association and with the hope and best wishes for a continued growth and expansion.

RESOLUTION

WHEREAS, the members of the Oklahoma State Medical Association, as a result of their close contact with the medical care problems of the people of the State of Oklahoma and as a result of their knowledge of those problems are keenly aware of the demand and need for additional well qualified and trained doctors of medicine in the State, and,

WHEREAS, the present facilities of the Medical School of the University of Oklahoma are not adequate to train a greater number of physicians, and

WHEREAS, it is most apparent that the 80 students per year which it is now possible to admit to the Medical School will not in any case provide a sufficient number of trained graduates to even maintain the present inadequate ratio of doctors of medicine to population, and,

WHEREAS, any increase in the number of students admitted to and graduated from the Medical School will require the provision of additional facilities for both the Medical School and the University Hospitals:

NOW THEREFORE BE IT RESOLVED, By the House of Delegates of the Oklahoma State Medical Association at its 57th Annual Meeting in Oklahoma City, Oklahoma, this 4th day of June, 1950, that the people of the State of Oklahoma, through the Oklahoma State Legislature, are urged to provide sufficient funds for the Medical School to make possible annual graduation of a class of at least 125 well trained and qualified doctors of medicine.

RESOLUTION

WHEREAS, The Oklahoma Medical Research Foundation is now a reality due to the untiring efforts of the people of Oklahoma, and

WHEREAS, the Alumni Association of the Medical School of the University of Oklahoma has made such an outstanding contribution to the creation of the Foundation, and

WHEREAS, The Medical profession fully recognizes the great benefits to mankind that will emanate from this institution in behalf of the people of the United States and the World.

NOW THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association again goes on record urging each and every physician of the Association to give their untiring efforts to the growth and promotion of the Oklahoma Medical Research Foundation.

RESOLUTION

WHEREAS, there is a growing tendency in the United States today toward interference and regulation

in every field of human endeavor, and

WHEREAS, such interference and regulation is the opening wedge for the encroachment of the socialistic system on the present American system of freedom of endeavor and enterprise, and

WHEREAS, this tendency is not in any way limited to the interests of any particular group, but is being manifested in such widely varied fields as the practice of medicine, housing, power production and distribution and even agriculture,

NOW THEREFORE BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 57th Annual Meeting in Oklahoma City, Oklahoma, this 4th day of June, 1950, that the Oklahoma State Medical Association hereby denounces as undemocratic and un-American, all and any efforts which will result in the socialization of any business, industry, group or profession, and

BE IT FURTHER RESOLVED that copies of this Resolution are to be directed to the President of the United States and the members of the Oklahoma Delegation in Congress.

RESOLUTION

WHEREAS, in its beginnings the American Medical Association concerned itself exclusively with the development of the art and science of medicine, and

WHEREAS, the unequalled progress of the science of medicine in the United States can in a great degree be attributed to the efforts of the American Medical Association, and

WHEREAS, There was for many years no need for the American Medical Association to concern itself with the social and economic problems of the nation, and

WHEREAS, realizing that the situation had changed and that if the medical profession was to continue to insure to the people of the United States the very best in health and medical care, the American Medical Association would be compelled to exert its efforts not only toward the scientific development of medicine, but toward the solution of social and economic problems being brought upon us in a great degree by social planners in our government, and

WHEREAS, the American Medical Association, recognizing its responsibility, has risen to the challenge and is now engaged in a national educational campaign designed to emphasize to the people of the nation and to Congress the destructive effects which any type of socialized medicine would produce in the health and medical care of the people; the great burden such a system would impose on the national economy and the taxpayer; and the ethical, moral, and scientific degeneration such systems invariably produced in the medical profession and the unfortunate effects upon the people in general.

NOW, THEREFORE, BE IT RESOLVED, by the House of Delegates of the Oklahoma State Medical Association at its 57th Annual Meeting in Oklahoma City, Oklahoma, this 4th Day of June, 1950, that the Oklahoma State Medical Association reaffirms its support of the educational program of the American Medical Association and commends the American Medical Association, its officers, and the directors of the educational campaign for their untiring efforts which are now beginning to produce results, and

BE IT FURTHER RESOLVED that copies of this resolution shall be directed to the President of the American Medical Association, to its secretary, and general manager, and to the Directors of its Educational Campaign.

* * *

The following resolution was passed unanimously by

the Pittsburg County Medical Society and will be presented to the House of Delegates by the representatives of the County at the June meeting.

RESOLUTION

TO: The House of Delegates of the Oklahoma State Medical Association.

FROM: The Pittsburg County Medical Society.

Whereas, it is the opinion of many physicians and laymen that:

1. The educational plan for training physicians has been in the direction of excessive specialization:

2. That this program has produced a concentration of physicians in cities and larger centers, to the neglect of the smaller communities:

3. That the medical profession and medical schools are recognizing their mistake and are making an effort to correct it:

4. That hospitals are being built and physicians are being provided in the smaller communities:

And whereas, the proper application of good medical care and hospital service is dependent to a large extent on adequate assistance by the allied professions, the main one of which is the nursing profession:

And whereas, the requirements imposed on any hospital for operating a training school for nurses are such that many hospitals are closing their training schools:

And whereas, the requirements of said training schools are such that many deserving, capable, and willing girls cannot enter:

And whereas, training schools now are only in the larger centers and girls receiving training in these centers never return to their home communities:

And whereas, there is an extreme shortage of trained nurses in cities of 20,000, and smaller, and that hospitals in these communities do not have adequate supervision, and that nursing care to the patients is administered by nurses aids with little or no training, and often the service rendered is very inferior in character:

And whereas, proper staffing of hospitals in smaller communities with trained nursing personnel is essential to providing adequate medical care to these communities:

Therefore, be it resolved that the Oklahoma State Medical Association request the American Medical Association to urge and work with the American Nurses Association, the American Hospital Association, The American College of Surgeons, and any other organization involved to devise some plan whereby an adequately trained personnel can be provided to relieve this situation and that such changes be made in the nurses training program that a satisfactory plan can be executed.

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association shall work with the Oklahoma State Nurses Association and the Oklahoma State Hospital Association to aid in this program at a state level, and that copies of this resolution be sent to all other state medical associations.

RESOLUTION

WHEREAS, the people of the State of Oklahoma and the United States, as a result of the untiring efforts of the medical profession, now enjoy the best health, the finest medical care and the greatest life expectancy of any comparable group of people in the world, and

WHEREAS, those great benefits to the people have been made possible and have become a reality under a system of medical practice unfettered by governmental interference and control, and

WHEREAS, the adoption of any type of socialized medicine or national compulsory health insurance in other countries of the world in every case has clearly

demonstrated a lowering in the health standards of the people and a lessening of the quality of their medical care in addition to imposing an unbearable burden on the national economy and the taxpayers, and,

WHEREAS, such systems of government medicine have in every nation in which they have been tried, resulted in ethical, moral and scientific degeneration of the medical profession, and,

WHEREAS, the medical profession in Oklahoma stands firm in its belief in the traditional American principles of freedom of enterprise in all fields of endeavor, and,

WHEREAS, no system of socialized medicine or government medicine can be reasonably considered to be consistent with its principles;

NOW THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association at its 57th Annual Meeting in Oklahoma City, Oklahoma, this 4th day of June, 1950, expresses the unalterable opposition of the Oklahoma State Medical Association to any system which will enforce upon the people of this state and the United States any type of governmentally controlled and administered medical care, and,

BE IT FURTHER RESOLVED, that copies of this resolution shall be directed to the President of the United States, to the members of the Oklahoma delegation in Congress, to the Chairman of the United States Senate Committee on Labor and Foreign Commerce, to the Federal Security Administrator, and to the headquarters of the American Medical Association.

RESOLUTION

WHEREAS From time to time circumstances and situations develop between hospitals, physicians and Voluntary Health Plans and;

WHEREAS The responsibility for protecting the health of the public lies within the scope of the hospital, physician and Voluntary Health Plan as it pertains to the public's health and welfare, and;

WHEREAS The House of Delegates of the American Medical Association recommended to each of its constituent state associations at its annual session held in Atlantic City, New Jersey, June 6 to 10, 1949, the establishment of a committee on hospitals and professional relations to be available to receive complaints from any physician, hospital, medical organization or any other interested person or group with reference to professional or economic relations existing between doctors of medicine, hospitals or Voluntary Prepayment Medical Plans,

NOW THEREFORE BE IT RESOLVED That the House of Delegates of the Oklahoma State Medical Association be requested to endorse this action of the American Medical Association to the end that such a committee be immediately created within the framework of the Oklahoma State Medical Association, and

BE IT FURTHER RESOLVED That the Oklahoma State Medical Association requests its County Medical Societies to create like committees for a like purpose if, in the judgment of the county societies, there is a need for such a committee within its jurisdictional area.

RESOLUTION

WHEREAS, the medical profession has in the interests of the public, and most state laws, restricted the corporate practice of medicine, and

WHEREAS, medical service and hospital service have been defined by the American Medical Association, and

WHEREAS, many hospitals are causing physicians to render medical service in violation of the principles of medical ethics, and

WHEREAS, any hospital following such practices is

in violation of state law, and

WHEREAS, it is believed that this problem of proper hospital service and medical care should, for the purpose of uniformity, be decided on a National level.

NOW THEREFORE BE IT RESOLVED that the Delegates from the Oklahoma State Medical Association to the American Medical Association be commended for their past support of these principles and

BE IT FURTHER RESOLVED that this House of Delegates requests the Delegates to continue their support of any resolution or Committee report submitted for consideration by the House of Delegates of the A. M. A., at its 1950 session, which resolution or report removes professional services, as have been defined by the A.M.A., from hospital control; such method or removal or separation to not be in violation of the principles of medical ethics or any State or Federal law.

RESOLUTION

WHEREAS, The position of President of the Oklahoma State Medical Association is an important responsibility requiring a sacrifice of personal and professional time of the physician upon whom conferred, is necessarily financially penalizing him in his practice, and

WHEREAS, in the course of his official duties the President of the Association shall incur certain expenses and

WHEREAS, the financial penalty of holding this office is consequently so great as to discourage many physicians who possess high requirements for office, and,

NOW, THEREFORE, BE IT RESOLVED, THAT all of the expenses of the President of the Oklahoma State Medical Association in the discharge of official duties be paid for from the funds of the Association.

BE IT FURTHER RESOLVED, that this action by the House of Delegates become effective immediately upon passage.

RESOLUTION

FOR PRESENTATION TO THE HOUSE OF DELEGATES OF THE OKLAHOMA STATE MEDICAL ASSOCIATION, JUNE 4, 1950.

WHEREAS, the Department of the Army has announced plans to suspend publication of the valuable medical reference index, The Index Catalog of the Surgeon General's office, and

WHEREAS, many libraries, medical libraries, and other agencies are in need of many back issues of the Index to complete permanent files, and

WHEREAS, this reference source is invaluable to scholars and students of medicine, and

WHEREAS, past sets of the Index Catalog are out of print and unobtainable,

NOW THEREFORE, be it resolved that the House of Delegates of the Oklahoma State Medical Association instruct the officers of the Association to take immediate and effective steps to have introduced into the national Congress a bill to appropriate sufficient funds to reprint all back issues of the Index in numbers sufficient to meet the current demand, and

BE IT FURTHER RESOLVED, that a report of the progress of this project be reported to the Council not later than September 1, 1950 and that copies of this resolution be sent to all Oklahoma Congressmen.

RESOLUTION

The Board of Trustees of the Oklahoma Blue Cross and Blue Shield Plans recognize the basic principle that these non-profit voluntary plans shall not interfere with the doctor-hospital-patient relationship; and that the execution of these plans shall not, in any community, employ regimentation of the profession in any way.

Since the doctors are free to admit, administer to,

and discharge patients from hospitals without restriction, it is obvious that the financial success or failure of these plans is in the hands of the attending physician. Recognizing these precepts, the profession must assume its responsibility in the execution of these programs.

Therefore, be it resolved that the House of Delegates of the Oklahoma State Medical Association hereby instruct each County Society to appoint a liaison committee with the prepayment plans composed of three or more M.D.'s who may be past presidents, who will also be empowered to handle grievances with the commercial insurance companies, and the functions of which shall be to invite reports from these non-profit voluntary prepaid plans where a lack of cooperation by the profession, individually or in groups, exists, and that the committee cooperate with the plans in bringing about relationships that will assure success of the prepaid program. Unless such cooperation is forthcoming in the respective communities, the plans are justified in terminating their activity in such communities.

RESOLUTION

WHEREAS, the advancement of medical science and knowledge and the consequent increase in the complexity of present day medical care has brought about an unavoidable increase in the costs of medical care, and

WHEREAS, this increased cost, along with present general inflationary tendencies is a heavy burden upon any person requiring medical and hospital care at a time when he is least able to bear such a burden, and

WHEREAS, voluntary health and medical care plans are available and offer to all the people a means of budgeting the necessary expenses of such care, and

WHEREAS, these voluntary plans are available without governmental interference and regulation, and

WHEREAS, these plans are now being provided at a cost to the individual much lower than would be the cost of any type of national compulsory health insurance, and

WHEREAS, these voluntary plans for medical care are growing daily and can readily be expanded to include all persons who could be covered under any government plan,

NOW, THEREFORE, BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 57th Annual Meeting in Oklahoma City, Oklahoma, this 4th day of June, 1950, that the Oklahoma State Medical Association hereby reaffirms its support and endorsement of every type of voluntary health and medical care coverage available through the commercial insurance companies, fraternal organizations, the Blue Cross and Blue Shield, or any other voluntary societies.

Doctor E. H. Shuller, of McAlester, was recognized and congratulated Doctor Garrison on his leadership during the past year and asked for a standing vote of appreciation to Doctor Garrison.

The Speaker requested the Sergeants-At-Arms to escort the newly elected officers to the front. Doctor McGill introduced the new officers. George H. Garrison, M.D., expressed his personal pleasure at having served as President of the Oklahoma State Medical Association.

The business of the 1950 meeting of the House of Delegates having been completed the Speaker of the House declared the meeting adjourned at 10:00 P. M.

Respectfully submitted,
L. Chester McHenry, M.D.
Speaker of the House

Reported by Rosalee Baskins

PLAN NOW TO ATTEND

THE POST GRADUATE ASSEMBLY OF SOUTH TEXAS

Sixteenth Annual Meeting . . . November 20, 21, 22, 1950

SHAMROCK HOTEL ————— HOUSTON, TEXAS

Three Separate Sections: Medical, Surgical and Eye, Ear, Nose and Throat
9:00 A.M. . . . to . . . 6:00 P.M. Daily

DAILY LUNCHEON — For All Sections Combined —

Followed by Program of Relaxation and Questions and Answers

DISTINGUISHED GUEST SPEAKERS

RECEPTION AND DANCE . . . TUESDAY EVENING — NOV. 21st.

Arthur J. Bedell, M.D., Emeritus Prof. of Ophthalmology, Albany Medical College, Albany, N. Y.

William Boyd, M.D., Prof. of Pathology and Bacteriology, University of Minnesota, St. Paul, Minn.

Amos Christie, M.D., Prof. of Pediatrics, Vanderbilt University, Nashville, Tenn.

William Demeshek, M.D., Prof. of Clinical Medicine, Tufts College Medical School, Boston, Mass.

O. Spurgeon English, M.D., Prof. of Psychiatry, Temple University, Philadelphia, Pa.

Nicholson J. Eastman, M.D., Prof. of Obstetrics, Johns Hopkins University, Baltimore, Md.

L. Kroeer Ferguson, M.D., Prof. of Surgery, Graduate School of Medicine, Univ. of Pennsylvania, Philadelphia, Pa.

L. H. Garland, M.D., Clinical Prof. of Radiology, Stanford University, San Francisco, Cal.

John H. Gibbon, Jr., M.D., Prof. of Surgery and Director of Surgical Research, The Jefferson Medical College, Philadelphia, Pa.

Julius Lempert, M.D., Director of Surgery and Post Graduate Teaching, Lempert Institute of Otolaryngology, New York City.

Francis W. Lynch, M.D., Clinical Prof., Division of Dermatology, University of Minnesota, St. Paul, Minn.

Robert B. McIver, M.D., Chief, Dept. of Urology, Duval Medical Center and St. Vincent's Hospital, Jacksonville, Fla.

Robert A. Ross, M.D., Associate Prof., Obstetrics and Gynecology, Duke University, Durham, N. C.

Byron Smith, M.D., Assistant Prof., Ophthalmology, New York University College of Medicine, New York City.

Dr. Howard B. Sprague, Associate Physician at the Massachusetts General Hospital and Clinical Associate in Medicine at Harvard Medical School.

George H. Thiele, M.D., Co-Chief, Colon Surgery, Kansas City General Hospital, etc., Kansas City, Mo.

O. E. Von Aylor, M.D., Associate Clinical Prof. University of Illinois, Chicago, Ill.

Nathan A. Womack, M.D., Prof. of Surgery and Head of Dept. of Surgery, State University of Iowa, Iowa City, Iowa.

INTERESTING AND INSTRUCTIVE SCIENTIFIC EXHIBITS, TECHNICAL EXHIBITS AND MOTION PICTURES.

REGISTRATION FEE \$20.00 COVERS ALL FEATURES

(Reduced Fee of \$10.00 to doctors on Active Duty in the Armed Forces)

FOR FURTHER INFORMATION ADDRESS THE POST GRADUATE MEDICAL ASSEMBLY OF SOUTH TEXAS
229 Medical Arts Building, Houston, Texas.

OFFICERS OF COUNTY SOCIETIES, 1950

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	Jack F. Parsons, Cherokee	John X. Blender, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	B. B. Coker, Durant	W. A. Hyde, Durant	
Beckham.....	H. K. Speed, Sayre	V. R. Payne, Cheyenne	Second Tuesday
Blaine.....	C. L. Rogers, Canton	Virginia Curtin, Watonga	Second Thursday
Caddo.....	Paul Smith, Carnegie	E. T. Cook, Jr., Anadarko	Third Thursday
Canadian.....	Joseph H. Goldberger, El Reno	Jack W. Myers, El Reno	Subject to Call
Carter.....	Pat Lawson, Marietta	Ethel M. Walker, Ardmore	Second Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	First Tuesady
Choctaw-McCurtain- Pushmataha.....	Floyd L. Waters, Hugo	H. D. Wolfe, Hugo	
Cleveland.....	James F. Hohl, Norman	James O. Hood, Norman	Fourth Thursday
Comanche.....	Lawrence W. Ferguson, Lawton	Charles Graybill, Lawton	Second Tuesday
Cotton.....	Willard L. McGraw, Walters	Mollie Seism, Walters	Third Friday
Craig-Ottawa.....	L. P. Hetherington, Miami	J. E. Highland, Miami	
Creek.....	J. F. Curry, Sapulpa	Walter Cale, Sapulpa	Second Tuesday
Custer.....	C. B. Cunningham, Clinton	J. B. McGolrick, Clinton	Third Thursday
Garfield-Kingfisher.....	Charles J. Roberts, Enid	Roscoe C. Baker, Enid	Fourth Thursday
Garvin.....	Jesse R. Waltrip, Pauls Valley	John R. Callaway Pauls Valley	Wed. before 3rd Thur.
Grady.....	Aaron Little, Chickasha	B. B. McDougal, Chickasha	Third Thursday
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Greer.....	David Fried, Mangum	J. B. Hollis, Mangum	2nd Mon. Ea. Mo.
Haskell-LeFlore.....	N. K. Williams, McCurtain	G. M. Hogaboom, Heavener	
Hughes.....	L. A. S. Johnston, Holdenville	Gene Slagel, Holdenville	Third Tuesday
Jackson.....	Willard D. Holt, Altus	Malcolm Mollison, Altus	Last Monday
Jefferson.....	Phillip Kouri, Ryan	John B. Jacob, Waurika	Second Monday
Kay-Noble.....	J. W. Francis, Perry	N. H. Cooper, Ponca City	Second Thursday
		C. D. Northcutt, Ponca City, Executive Secretary	
Kiowa-Washita.....	M. Wilson Mahone, Hobart	William Bernell, Hobart	First Wednesday
Lincoln.....	Harold T. Baugh, Meeker	Edward F. Hurlbut, Meeker	Third Tuesday
Logan.....	Phillips R. Fife, Guthrie	John Souter, Guthrie	
McClain.....	Paul Obert, Purcell	W. C. McCurdy, Jr., Purcell	
Muskogee-Sequoyah- Wagoner.....	Carson L. Oglesbee, Muskogee	Virgil D. Mathews, Muskogee	First Tuesday
Northwestern.....	E. A. McGrew, Beaver	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	M. L. Whitney, Okemah	Dayton Rose, Okemah	2nd Mon. Ea. Mo.
Oklahoma.....	John F. Kuhn, Oklahoma City	Ralph Smith, Oklahoma City	Fourth Tuesday
		Mrs. Muriel Waller, Exec. Secty.	
Okmulgee.....	M. L. Peter, Okmulgee	S. B. Leslie, Okmulgee	Second Monday
Osage.....	Vincent Mazzarella, Hominy	Paul Williamson, Pawhuska	Third Thursday
Payne-Pawnee.....	M. L. Saddoris, Cleveland	J. H. Rollins, Pawnee	Third Friday
Pittsburg.....	William P. Lerblance, Jr., Hartshorne	H. C. Wheeler, McAlester	Third Friday
Pontotoc-Murray.....	E. R. Muntz, Ada	C. P. Taylor, Jr., Ada	1st and 3rd Wed.
Pottawatomie.....	C. C. Young, Shawnee	Clinton Gallaher, Shawnee	Third Wednesday
Rogers-Mayes.....	Paul B. Cameron, Pryor	P. S. Anderson, Claremore	Third Wednesday
Seminole.....	J. D. Wood, Seminole	Mack Shanholtz, Wewoka	Third Wednesday
Stephens.....	W. R. Cheatwood, Duncan	Fred W. Taylor, Duncan	Third Wednesday
Texas.....	G. A. Hopkins, Guymon	W. N. Oxley, Texhoma	
Tillman.....	J. E. Arrington, Frederick	O. G. Bacon, Frederick	
Tulsa.....	Fred E. Woodson, Tulsa	John G. Matt, Tulsa	Second and Fourth Monday
Washington Nowata.....	R. C. Gentry, Bartlesville	Mr. Jack Spears, Exec. Secty.	
Woods.....	D. B. Ensor, Hopeton	R. J. Bogan, Bartlesville	
		W. F. LaFon, Alva	2nd Wed. Odd Months

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Grady F. Mathews, M.D., Oklahoma City.

(Number after name indicates years to be served.)

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(As approved by the Crippled Children Act)

Earl D. McBride, M.D., Chairman, 605 N. W. 10th St., Oklahoma City.

I. F. Stephenson, M.D., Alva, Vice-Chairman.
Joe N. Hamilton, Secretary, 805 Midwest Bldg., Oklahoma City.

J. F. Park, M.D., McAlester; Floyd Newman, M.D., Shattuck; E. Eugene Rice, M.D., Shawnee, and M. M. Williams, D.D.S., Chickasha.

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(Representing Kansas, Missouri, Arkansas, Oklahoma, Texas)
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Everett S. Lain, M.D., Oklahoma City.

Executive Director

J. R. B. Branch, M.D., Commerce Exchange Bldg., Oklahoma City, Okla.

OKLAHOMA STATE MEDICAL ASSOCIATION

Executive Office—1227 Classen, Oklahoma City, Oklahoma.
Phone 79-1648.

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Delegates to the A.M.A.: John F. Burton, M.D., Oklahoma City, and James Stevenson, M.D., Tulsa
Alternate Delegates: Maurice J. Searle, M.D., Tulsa; and Finis W. Ewing, M.D., Muskogee

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Keaton-Wells-Johnston and Lytle
Commerce Exchange Building
Oklahoma City, Oklahoma

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

MEDICAL AND SURGICAL FEES

Fees for professional services loom large in the important field of public relations. This is no time to be careless or exacting in the matter of fees. Seldom are medical or surgical fees exorbitant. But the doctor should discuss the question of costs with the patient or members of the patient's family and make sure they are reasonable in the light of the patient's ability to pay and that they are acceptable.

Since medical and surgical care fall within the realm of a profession and since the professions are for service and not for gain, it is imperative that the patient-physician-fee relationship have freedom in the practice of medicine. Looking after the patient's interests, adjusting fees to fit his purse, and gaining his confidence through the assurance of good service is only a matter of keeping in line with accepted professional principles but it is plain good business. If these principles had been assiduously pursued by all members of the medical profession, all the fuss about public relations would be unnecessary.

The trend that has led us astray is universal. Even the profession of the staid old state of Massachusetts must take its members to task. In the Aug. 3 *New England Medical Journal* we find the following in an editorial entitled "The Doctor's Fee."

"As an additional step in the efforts of the Massachusetts Medical Society to develop and maintain good public relations, the Council, at its annual meeting in 1949, appointed a subcommittee of the Committee on Public Relations, to explore the whole problem of (medical) fees throughout the Commonwealth."

In its report to the Council the Committee indicated that indiscretions in the matter of fees are relatively infrequent but "The Committee nevertheless believes that an agreement should be reached by the medical profession of the Commonwealth regarding the principles involved, based on the following factors:

"1. The value of the service, whether

easily definable, such as fees for laboratory examination, or relatively indefinite, as fees for anesthesia, roentgenologist's opinion, or such indeterminable value as an unusual operation or a life-saving measure.

"2. The nature of the service rendered, with consideration of the technical difficulties, the diagnostic complexity, the length of time consumed and the degree of responsibility assumed.

"3. The ability of the patient to pay, with reference to his income, family responsibilities, and the effect upon future income of a long-lasting illness or an ultimately unfavorable prognosis."

From the above it is easy to see that the fee question is not comparable to fixing the price on bacon, or flour but a much more complex one making it all the more necessary to give careful attention to its solution.

This is a matter our own State Association might well consider.

YOUR HEART IS IN THE CHEST



The Community Chest Campaign is now in progress.

This annual appeal for community weal brings to every responsible resident the opportunity of good citizenship. It emphasizes the ever recurring questions, "Who is my brother?" "Who is my

neighbor?"

To physicians who, better than anyone else, know the follies, the frailties and the sins of life, the answers are easy. To physicians taught by experience to be tolerant and generous, the response should be equally easy.

Of all people, physicians, so richly endowed with knowledge and experience, should be able to count their blessings and share with those who are less fortunate. All physicians worthy of the profession have learned to give and to give freely.

A little more please for the Community Chest. Your heart is in your chest; your pen is in your vest, your checkbook at your behest. It will hurt not to give.

SIGNIFICANT

The following lifted from the columns of the *Jackson County Medical Society Weekly Bulletin* under the title, "Labor Editor's View of Pepper Defeat," should be well digested by every doctor in the State of Oklahoma who thinks he is too busy to give personal attention to vital political issues.

"The editor of the United Mine Workers' Journal in an editorial in its May 15 issue states, among other things, 'That Senator Pepper had to bear the brunt of all the fault-finding leveled at the Brannan Plan, foreign aid, give-away money, government extravagance, Kansas City graft, and national medicine.'

"He further states, 'In 44 years of covering political campaigns in the nation and in many states, your editor has never witnessed such effective and productive quiet solicitation of votes as demonstrated by Florida doctors, druggists, dentists, hospital staffs, insurance companies and pharmaceutical representatives, aided and abetted by other professional men.

"On the medical question, labor had better begin to think, because if resentment of the voters to national medicine in one-third of the states proves as beneficial to reactionary candidates as in the case of Smathers, the problem of repealing the Taft-Hartley Law—so long as both are linked in the Truman program, will be three times as difficult.

"Regardless of how lightly President Truman may seek to brush off the Pepper defeat, the fact remains that the over-all resentment against Pepper crystallized as a result of Pepper's all-out support of the Truman program."

Hope and action will help while we lean on the crutch of time.

FOR EVERYBODY'S DOCTOR

On October 30-31 and November 1 and 2, the Oklahoma City Clinical Society spreads its annual intellectual feast in the field of medical science. In this progressive age, to succeed in the practice of medicine, the physician must be intellectually well nourished. The physician's patients, whose lives are dependent upon his knowledge have a right to demand that he enlarge his learning, sharpen his wits and augment his skills by attending such meetings. The physician who awaits this demand is lowering professional standards, risking his community rating and shattering medical traditions.

Oklahoma's physicians represent a high average. They must be as good as the best.

For the benefit of those who would measure up, the Oklahoma City Clinical Society is exhibiting a number of the chosen best from the four corners of the continent. Come see, hear, receive, record, integrate and assimilate. Go home, practice and apply. Perhaps there was a time when primitive people used pebbles instead of pennies to close the eyes of death. Then through their religious superstitions and often unwarranted faith, the medicine man was absolved regardless of his shortcomings. Not so today. The people are relatively enlightened. The physician must know.

THE PRESIDENT OF THE A.M.A. TO ADDRESS THE OKLAHOMA CITY CLINICAL SOCIETY

Doctor Elmer L. Henderson, occupying the highest office of American Medicine, will address the Clinical Society and all visiting guests at 7:00 p.m. October 30.

Doctor Henderson is devoting much time and energy to the cause of organized medicine upon which rests the future of both patient and physician. He is making great personal sacrifices in behalf of the medical profession and the people. He should have the hearty support of all doctors.

His responsibility and the tasks confronting him become more urgent and are more difficult because of the critical period in which his administration falls.

True to tradition, Oklahoma will appear in force to uphold his hands.

THE PENN TEST FOR CANCER

According to Dr. Leonard A. Scheele, Surgeon General of Public Health, this is the "most promising of all the general tests so far reported". In fact, arrangements have been made for a thorough trial and study of this test under the direction of Dr. Stewart W. Lippincott at Seattle where the University of Washington and the United States Public Health Service cooperate in the evaluation of diagnostic cancer tests.

This is a serum flocculation reaction discovered in the blood of cancer patients. The test was developed by Dr. H. S. Penn in collaboration with his co-workers at the University of California, Los Angeles. They report the results of the test on about 4500 persons.

In normal persons the test was negative in 99.5 per cent. In persons suffering from cancer, it was positive in 98.6 per cent. A false positive reaction may occur in certain chronic conditions such as tuberculosis.

syphilis and arthritis, also in pregnancy. Usually such conditions are diagnostically obvious and should not seriously discredit the test.

The implications are that in the interest of both private and public health, mass testing with an agent as effective as this one promises to be, the discovery of cancer in its early stages may be materially accelerated. While awaiting specific therapy for cancer, early diagnosis is very important. The final results of the test as determined on the U.S. Public Health proving grounds are awaited with great interest.

MEDICINE AND SOCIETY IN TRANSITION

In a chapter on medicine in retrospect and prospect the writer has called attention to the difficulty of staging the moving drama of medicine as it wrestles with the progress of science in a changing world.

The relative position of the physician of today as compared to that of 50 years ago, the multiplicity and complexity of the ever mounting problems in the practice of medicine, the change in public attitude toward the profession and the necessity for a better understanding and mutual adjustments are discussed.

The medical profession's plight in a rapidly changing world calls for a broad humanitarian attitude toward the problems of both the people and the profession.

Unless we travel the road ahead with an open mind, a broad gage tolerance and a spirit of compromise, when this is necessary for human weal, we may expect to lose our freedom.

The chief danger arises through the fact that it is so difficult for us to realize the changes in our own ranks and the marked alteration in the mass psychology as related to the medical profession.

There are good reasons which we must take into account and there must be ways and means of meeting these changes which must be found if we wish to preserve a truly democratic method of practice.

Since there is no way to flee this state of flux the following story of a flying trapper may help to bring a true realization of our position in a changing world. He roared into Edmonton Alberta recently "with grizzly bear claw marks on his fuselage. The bear had smelled the trapper's cargo of fresh beaver skins and almost tore the plane apart".

If this high scientific, mechanistic drive is undoing the Canadian grizzly's civilization what may it not have done to our own way of life. Are we moving too fast to take note of it and to accurately appraise and evaluate its meaning.

In Margaret Kennedy's new book "The Feast," an overworked British hotel maid is represented as saying "This Socialist Government does not look after poor people like they promised but they have brought rich people down, which is one comfort."

Though few members of the medical profession ever attain wealth relatively they are up, and voluntarily coming down a notch or two may be much better than being brought down.

THE THREAT

The threat of medical controls by government, similar to those imposed upon the medical profession of Great Britain with maximum penalties upon the common people and the general practitioners, comes from a so-called security agency, extravagantly operating in our own government. Every citizen of the United States who can read and write should see the report of the subcommittee on overstaffing in Executive Departments and agencies and employ his influence in support of justice, honor, integrity and economy.

The same citizens, regardless of their various affiliations and socio-economic philosophies, should read the article in the *Saturday Evening Post* of July 8 by Paul F. Healy entitled "The Man the Doctors Hate".

In view of the position taken in the Oklahoma State Medical Journal in months past with reference to this man, it is gratifying to find confirmation through opinions expressed in this great exponent of American thought. Oscar R. Ewing loves the spotlight, but after being blistered by Healy, he needs a healing light.

THE 1950 DIRECTORY

The New Directory is now on every member's desk and serving the profession in a thousand different ways. If those who have received it could know what it cost in "blood, sweat, and tears," they would give the Executive Office a rousing round of three cheers. Football games that put your hats in the air have nothing on the team that drummed up the answers to your questionnaire.

SCIENTIFIC ARTICLES

CLINICAL FEATURES OF PELVIC ENDOMETRIOSIS*

CURTIS H. TYRONE, M.D.
NEW ORLEANS, LOUISIANA

The importance of endometriosis as a clinical entity is evidenced by the increasing number of reports appearing in recent years in the medical literature. The condition became more widely recognized clinically following the excellent report on this subject by Sampson¹ about 30 years ago. Since then Novak² and a host of other writers have called attention to the importance of this condition in the adult female population. Today pelvic endometriosis has assumed a position in private practice of far greater importance than have pelvic infections. One reason for this is that in the past decade pelvic infections have been largely controlled by public education and early treatment with chemotherapeutic and antibiotic agents so that the necessity for pelvic surgical procedures for combatting acute pelvic infections has practically been eliminated.

ETIOLOGY

Pelvic endometriosis has been defined by Sampson³ as "the presence of ectopic tissue which possesses the histological structure and function of the uterine mucosa." Many theories have been advanced to explain its cause and development. We are all familiar with Sampson's theory of the transplantation of viable endometrial cells and stroma by regurgitation through the fallopian tubes. This was the first and most popular explanation of the pathogenesis of this condition. Equally well known is the theory of cell metaplasia among whose proponents are Novak² and Meyer^{4,5}. It is probably true that no one current theory would apply to all proved cases of pelvic endometriosis.

From the purely clinical standpoint Meigs⁶ has expressed the opinion that the incidence of this condition is increasing because of the current use of contraceptives, which results in delaying the normal function of childbearing. Hence, conception and

childbearing in young women would prevent the development of endometriosis in the later reproductive years. Although there is general agreement with this opinion, we believe that there is still another factor which favors the development of endometriosis. This can best be described as the increased tension state produced by our modern way of living. The social and economic emancipation of modern women from the protection afforded their mothers and the rise of women in the political, social and commercial fields to positions of importance have created, in some of them, a state of tension in which the clinical features of endometriosis become evident. Threats and experiences of war, depression and threats of recession, the mechanical age, cocktails, and competition in social life, along with delaying conception and unsatisfactory sexual life all aggravate the tension under which modern woman exists. Many young married couples who find it undesirable because of economic or social reasons to have a family are not familiar with the proper use of contraceptive agents and are ignorant of normal sexual practices. Such ignorance often results in inadequate or even depraved sexual practices, and therefore, in unhappy marriages. We believe that today every young couple contemplating matrimony should separately consult their physicians for premartial advice and examination. It is our duty as physicians to examine these couples and offer advice concerning their sexual life and the use of contraceptives. This would help them to make a more satisfactory sexual adjustment and consequently a happier marriage. We do not have to be gynecologists to perform this task; every physician, whether he be a general practitioner or a specialist, should assume this responsibility.

In interviewing patients and in reviewing histories of patients with pelvic endometriosis we have been impressed with the

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, June 5, 1950 in Oklahoma City, Oklahoma.

frequency of abnormal sexual adjustment in these women. In the married group, dyspareunia, impotence of the male and such abnormal sex practices as withdrawal and extramarital indulgence of the male with a resultant dissatisfaction of the wife create a tension state which must be a factor in the occurrence and extension of endometriosis in these individuals.

INCIDENCE

The true incidence of endometriosis is difficult to determine but there is no question that in private practice the condition is increasing in frequency. It is uncommon in charity practice and is almost unknown in the colored race. In one year at Charity Hospital in New Orleans the incidence of endometriosis on the gynecologic service was only five per cent as compared with an incidence of 17 per cent at the Ochsner Clinic during the same year. It is our belief that about 15 per cent of all patients seen in a strictly gynecological practice have endometriosis.

DIAGNOSIS

The importance of a careful history and thorough pelvic examination in the early diagnosis of endometriosis cannot be too strongly emphasized, since the condition is common and early treatment can greatly influence the course of the disease. Thorough inspection of the cervix and posterior vaginal wall can often give a clue to its presence. Dark or punctate areas on the cervix and hemorrhagic areas on the vaginal portion of the rectovaginal septum that bleed in slight trauma are evidence of the presence of pelvic endometriosis. Thorough palpation of the rectovaginal septum and cul-de-sac by combined rectal and vaginal examination may reveal painful, shotty nodules in this area. A retroverted, fixed uterus and painful enlargement or fixation of the adnexal structures in the absence of a history of pelvic infection can lead to the clinical diagnosis of this condition.

It is doubtful whether the use of a culdescope plays an important part in the diagnosis of endometriosis except for investigational purposes. In clinical practice we have found no indication for its use. To one who is constantly aware of the possibility of this condition the culdescope is not necessary and will not supplant sound clinical investigation. Moreover, if the cul-de-sac is extensively involved, culdoscopy might be dangerous. In the incipient case of endometriosis in which no treatment is necessary it is

of no therapeutic value.

SYMPTOMATOLOGY

The most frequent symptom of endometriosis is pain. This may be manifested as increased dysmenorrhea or more often as vague pelvic pain, soreness, pain in the inguinal region, backache or pressure sensation on the rectum or bladder. The pain usually comes on gradually. Often times repeated questioning is necessary before the patient will admit having this symptom. A patient will frequently deny the existence of pain until after relief has been obtained by surgical means when she will voluntarily admit "I did not know that I had so much pain until I obtained relief." This is due no doubt to the slow development of endometriosis; it requires months and even years to produce lesions that cause real pain. Over such a long period of time the patient's pain threshold is definitely increased. However, the same pathologic alteration in the case of pelvic infection developing in a short time would cause an immediate complaint from the most stable person.

Dyspareunia is probably the next commonest symptom. It is often associated with the small lesions that involve the rectovaginal septum or the ureterosacral ligaments. Incidentally, such dyspareunia, by decreasing the frequency of sexual relations and by the development of frigidity, may be an important factor in many cases of sterility.

Menstrual irregularities are rarely a presenting symptom in patients with early endometriosis. Such disturbances occur only after gross pathologic changes, such as enlarged, adherent ovaries and extensive uterine abnormalities, have taken place in the pelvic organs. This is manifested by a flow, often dark in color, which stops and then starts again with prolongation of the flow but rarely with flooding.

Sterility is always a prominent feature of endometriosis. This may be primary or secondary. Many one-child marriages can be traced to the progressive development of this condition. It is interesting to note that in our series in which radical surgical procedures were performed 28 per cent of the patients had never conceived, and in the same series 51 per cent had not conceived in the five years preceding operation.

TREATMENT

Perhaps the most important factor in the treatment of endometriosis is its diagnosis in the early stages of the disease. Although as a result of recent cancer campaigns, older

women are willing and even anxious to have routine pelvic examinations, young women, both married and single, are extremely reluctant to do so. Young women with relatively few symptoms, especially business women or bachelor girls and the married ones who delay conception, rarely request a pelvic examination. A surprising number of those who do have been found to have evidence of endometriosis in its earliest stages and, therefore, do not have symptoms. Although elimination of contraceptive practice in young married couples is obviously impossible, routine examination of these young people should be encouraged if incipient endometriosis is to be detected before it becomes disabling.

In many of these cases by informing the patient as well as her husband of the presence of endometriosis and explaining its importance as far as the future is concerned, it is possible to encourage early and repeated childbearing and thereby possibly prevent ultimate crippling surgical procedures.

In this modern enlightened age it is surprising that so many young women, from families like yours and mine, with higher educations and access to current literature, movies and radios never think of consulting their family physicians unless symptoms are severe. Many are more concerned over the remote possibility of cancer than the more likely possibility of endometriosis. If they are enjoying good health and are not ready to reproduce, abnormal conditions in pelvic organs may exist which, if uncorrected, might conceivably influence our future history, for it is from this group of women that our leaders of the future should be derived.

The only conservative nonsurgical measure to be offered these women is early and repeated pregnancies. In the early stages, when symptoms are not severe or extensive pathologic changes have not occurred we favor a period of watchful expectancy. At this time the patient's family physician can become a barrier to meddlesome pelvic operations. We doubt the efficacy of hormonal therapy in permanent control of this condition and its continued use in young women with no symptoms or pathologic changes in the pelvis is to be deplored. The employment of estrogens and androgens apparently delays progression of the endometriosis by suppression of the patient's own ovarian activity. Such suppression, if prolonged, may substitute one cause of anxiety in the pa-

tient for another. It remains to be seen whether temporary suppression of endometriosis by estrogens until such time as childbearing function is desired can be accomplished without lessening of fertility. To summarize the conservative management of these cases, it may be said that there is no specific treatment but correction of tension states, early and repeated pregnancies if possible and a period of watchful waiting are advocated.

If symptoms develop or increase and the pathologic condition spreads, conservative surgical procedures must be employed. The type of surgical procedure employed depends, of course, upon the degree of involvement. Releasing of the adhered ovary or ovaries and uterus is all that may be necessary. Suspension of the uterus should be reserved for those cases in which definite retroversion or retroflexion is associated with peritoneal involvement of the cul-de-sac, uterosacral ligament and pelvic peritoneum. Resection of ovarian endometrial cysts with preservation of normal ovarian tissue is far superior to cauterization of these lesions. The advisability of early conservative surgical procedures in this younger age group should be stressed. This does not mean that every young woman with endometriosis should have an immediate laparotomy, but a large number of these patients do present symptoms and pelvic findings which could be properly relieved by early conservative operations, which in turn would prevent later unsatisfactory radical procedures. Superior hypergastric sympathectomy is a palliative procedure of debatable value. Its use is limited to those patients in whom pain is a prominent symptom. It must be remembered that ovarian pain is not relieved by this procedure. It should be emphasized that conservative surgical procedures can and should be carried out when possible, and that bilateral oophorectomy should never be done simply because the patient has endometriosis.

It may be difficult to decide on conservative surgical procedures in the face of the existing pathologic condition. In young women with a strong desire for children, relatively inadequate procedures should be employed to permit later conception but it must be realized that radical surgical measures may subsequently become necessary. If the patient's family is completed and if reproduction is unlikely or undesirable, such conservatism is foolhardy and rarely justifiable

in the presence of severe symptoms or extensive pathologic involvement.

Extensive endometriosis in women beyond the age of childbearing or when the latter is no longer important should be treated by definitive surgical procedures. Castration by radium or roentgen therapy should be avoided in all cases suitable for surgical treatment. That postmenopausal bleeding led to hysterectomy in 60 of the 77 cases in our series further emphasizes the desirability of radical surgical treatment over measures leading to temporary or permanent suppression of the menses.

In regard to definitive surgical procedures, the primary concern of the surgeon is removal of the affected organs. In many cases removal of both ovaries is necessary but a healthy ovary should be preserved. In patients not approaching the menopause oophorectomy without hysterectomy is condemned without qualification. Hysterectomy with preservation of normal ovarian tissue is desirable even with extensive pelvic involvement. Gradual cessation of ovarian activity results, relief of symptoms is obtained and the artificial menopausal syndrome is eliminated. When possible, total hysterectomy should always be performed. In spite of extensive pelvic involvement of the tissues adjacent to the cervix, in our experience such involvement has rarely become a barrier to total hysterectomy, as has been the experience of some. No complications have arisen in our series from the additional surgical procedures and endometriosis of the cervix has been found in 12 instances. In four cases in which supravaginal hysterectomy had been done elsewhere, re-

moval of the cervical stump at a later date was necessary because of endometriosis. Again, the conservation of some ovarian tissue must be carefully evaluated in the light of anticipated subsequent clinical course.

SUMMARY

Endometriosis is becoming more important as a clinical entity because of its increasing incidence in private practice. This is probably due in part to the state of tension under which modern women have been compelled to exist. The condition can usually be diagnosed by a careful history and thorough pelvic examination. The most frequent symptoms are pelvic pain, dyspareunia, menstrual irregularities and sterility. For young women with a desire for children there is no specific treatment but an attempt should be made to correct the tension state and early and repeated pregnancies should be advised. If the condition becomes worse in these young women, conservative surgical procedures are indicated. Extensive endometriosis in women beyond the age of childbearing should be treated by definitive surgical procedures.

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ANNOUNCEMENTS

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1 and 2, Oklahoma City.

POSTGRADUATE COURSES IN PSYCHOSOMATIC MEDICINE. Psychosomatic Medicine October 30—November 1, 1950. University of Kansas School of Medicine, Kansas City 3, Kansas.

NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS. Annual Convention, October 26, 27 and 28, 1950. Stevens Hotel, Chicago.

AMERICAN COLLEGE OF PHYSICIANS. Thirty-second Annual Session, April 9, 13, 1951. St. Louis, Missouri.

NORTH TEXAS-SOUTHERN OKLAHOMA FALL CLINICAL CONFERENCE. September 20, 1950, Wichita Falls, Texas. Registration fee \$7.00 includes meals. Hotel reservations may be obtained by writing E. A.

Cox, M.D., 203 Hamilton Building, Wichita Falls, Texas.

DALLAS SOUTHERN CLINICAL SOCIETY. Fall and Winter Conferences in Gastro-Enterology, General Surgery, Cardiology, Obstetrics Gynecology.

SOUTHERN MEDICAL ASSOCIATION. November 13-16, 1950, St. Louis, Mo. For reservations address the Housing Bureau, Southern Medical Association, 911 Locust Street, Room 406, St. Louis 1, Mo. No hotel will be designated as general hotel headquarters as all meetings and scientific and technical exhibits will be held in Kiel Municipal Auditorium.

KANSAS CITY FALL CLINICAL CONFERENCE. 28th Fall Clinical Conference will be held October 2, 3, 4, 5, 1950 at Kansas City, Missouri.

AMERICAN MEDICAL ASSOCIATION INTERIM SESSION. December 5-8, 1950. Cleveland, Ohio.

GERIATRIC GYNECOLOGY*

B. C. CHATHAM, M.D.

CHICKASHA, OKLAHOMA

The increasing longevity of our population today and in the future is known to all of us. The problems of the women in the age group above 60 have become more frequent in practice; therefore, a review of the gynecological problems in this age group would seem to be worthwhile. Only the more common diseases will be touched upon. These shall be grouped under the symptoms causing the individual to seek medical advice.

A. PAIN

Pelvic pain frequently causes the patient to seek advice. The following causes of pain are not infrequently seen.

1. *Urinary Tract Infection*—Dysuria with frequency often accompanies the pain. The necessity of examining only catheterized urines is well known. The value of the sulfonamides, as well as the newer oral antibiotics, has been well proven in the treatment of urinary tract infection. Failure of cessation of symptoms or urinary findings after adequate treatment for at least a week necessitates further study such as urograms and/or cystoscopy. Posterior urethritis associated with stricture frequently is found if sought. Pain with passage of a 20F sound is diagnostic because one should be able to pass up to a 26 F without discomfort. Repeated urethral dilatation gives prompt relief.

2. *Appendicitis* is a disease poorly tolerated by the older age groups and should be considered in the differential diagnosis of right-sided pelvic pain. Here, as in children, the picture is frequently not characteristic. When reasonable doubt exists as to the presence of this disease, laparotomy is indicated, inasmuch as this older group tolerates poorly peritoneal soiling from a leaking appendix.

3. *Diverticulitis* of the sigmoid is a frequent cause of left-sided pelvic pain, especially in this age group. With this group of patients one should consider this entity

rather than a unilateral pelvic inflammatory disease. If the disease is anticipated, then proper preparation of the patient with intestinal sterilization can be done prior to surgery, if indicated, thus reducing the hazard in the treatment of this disease.

4. *Large bowel obstruction* due to malignancy and causing pain in the pelvis should always be kept in mind. If suspected, the necessary diagnostic procedures, as well as preoperative preparation, will prevent embarrassment to the operator. Infrequently one will find old scarred endometrial lesions as the cause of the obstruction.

5. Uterine Tumors

(a). *Benign tumors* of the uterus, such as fibroids, occasionally have their blood supply impaired and cause pain. Removal of the tumor and/or uterus is indicated after adequate patient preparation.

(b). *Malignant Tumors*. Pain is usually a late symptom of uterine malignancy, both of the cervix and of the fundus. Most frequently at the painful stage, operation is useful only as diagnostic confirmation of a clinical impression.

6. Adnexal Tumors

(a). *Benign* — Either cystic or solid tumors of the ovary can cause pain which is usually due to impairment of their circulation.

(b). *Malignant ovarian tumors* cause pain only late in the course of the disease.

It must be remembered that the finding of an adnexal mass larger than the normal ovary in the menopause is sufficient reason to advise an exploratory laparotomy.

7. *Atrophic changes* of the perineal skin are frequently painful. Biopsy of suspicious lesions should be made. The benign lesions of atrophy frequently will respond to simple hygienic measures, which include sitz baths and the use of a dusting powder. Some of the more resistant cases are helped by inunctions with an estrogenic cream. In gen-

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association June 5, 1950.

eral, the maceration and excessive moistness of the region should be prevented.

8. *Caruncles* of the urethra are quite painful. Visual examination will reveal them as fine papillomatous growths arising at the urethral meatus. Excision is indicated, along with pathological study of the tissue removed, inasmuch as a fair percentage of them are malignant.

9. *Atrophic changes* of the vaginal mucosa, with secondary infection, are frequently found as a cause of pain. Biopsy should be done whenever the lesions arouse suspicion. The response to the use of estrogenic vaginal suppositories is prompt. Treatment is to be of one week's duration and then to be followed by acid douches to prevent recurrence. Even with the use of one suppository daily for only one week may cause withdrawal bleeding from the endometrium. Occasionally the secondary infection of the vaginal mucosa is great enough to require the use of a local sulfa cream. At the present time the use of one capsule of aureomycin every 12 hours in the vagina seems to be superior to the sulfonamide creams.

10. *Pyometra* due to stenosis of the cervical canal is not infrequently seen. The passage of a uterine sound into the uterus will make the diagnosis. All of these patients should be curetted, because pyometra is often associated with malignancy, either of the cervix or of the endometrium. However, this diagnostic procedure should be deferred until the infection subsides.

11. *Hemorrhoids*. A thrombosed hemorrhoid is always painful and is very easily treated by the evacuation of the clot.

12. *Chronic Cervicitis*. This condition is found more frequently in the younger women. However, when found, treatment with cauterization and douching gives prompt relief. All should be studied for malignant changes.

13. *Hernia*. Older women, as well as men, have hernias. If suspected, they can be sought after and treated when found.

B. BLEEDING

In the older age group this is always a danger signal and deserves complete patient investigation to find its cause.

1. *Cervix* — Bleeding lesions of the cervix should always be biopsied. The taking of at least four specimens is considered better than the single piece of tissue. Treatment of cervical malignancies may either be surgical, irradiative, or both, depending upon the individual case, along with the physician's

preference and experience.

2. *Uterus* — Bleeding from the uterine cavity should be investigated by a thorough D&C. Utero-salpingography may be helpful prior to D&C. The best results for cancer of the endometrium have come from the use of preliminary intrauterine irradiation with around 4000 mg hrs of radium, followed in five to seven weeks by complete hysterectomy, along with bilateral salpingo-oophorectomy. The use of either the vaginal or the abdominal route for operation will depend upon the merits of the individual case plus the operator's preference.

3. *Caruncles* of the urethra frequently bleed, as well as cause pain.

4. *Atrophic Vaginitis* is often found to be the cause of a bloody vaginal discharge.

5. *Ovarian neoplasms*, whose cells have endocrine functions, may cause uterine bleeding. The finding of evidence of an endometrial proliferation along with an adnexal mass in the absence of a history of receiving endocrine preparations, is helpful, but infrequently obtained.

6. *Pessaries*. The failure to have rest periods from the use of pessaries may cause trophic lesions of the vagina. Treatment is obvious.

7. *Primary and secondary carcinoma* of the vaginal mucosa can occur. Squamous cell carcinoma arising primarily in the vaginal mucosa can only be treated on individual basis. Any malignancy in the human body can metastasize to the vagina and cause bleeding, but those of the tubes, ovaries, and kidneys are the most frequent offenders.

8. Probably the most frequent cause of bleeding in the older age group is the *use and abuse of estrogenic preparations*. The direct questioning about shots and "hormone" tablets is most important.

If there is any doubt as to the origin of the bleeding complained of, the insertion of a vaginal tampon for two or three days will indicate whether the bleeding is vaginal or not. Likewise, proctoscopy is a simple procedure that can be of great value. Milking of the urethra frequently will be helpful in the search for the bleeding site.

C.

The sensation of "something falling out" is a common complaint in this group. It can occur in nulliparous, as well as in the multiparous individual. Frequently, it is associated with "stress" incontinence of urine. Inquiry should also be made about the control of flatus and liquid stools. Dur-

ing questioning one often notes that the patient was asymptomatic prior to the menopause and that symptoms came several years after the "change." Many of these patients have worn some sort of pessary for years, having been told that nothing more could be done for them. Many are near recluses due either to urinary or fecal incontinence. The pelvic findings in this group include urethrocele, cystocele, rectocele, varying degrees of uterine prolapse, old incomplete and complete perineal tears, and enteroceles. Complete but gentle examination is important.

In the past, many of these women were denied the advantages of operation because they were "too old." Today, with careful preoperative evaluation and preparation, along with local or spinal anesthesia and the careful postoperative management, nearly all of these women can be operated and their later years made more tranquil.

The operations of choice are those employing the vaginal route. The extent and type will depend entirely upon the patient's

needs, along with the operator's experience and ability.

Following operation early ambulation is to be demanded. The use of antibiotics and estrogenic preparations will frequently hasten the healing phase. Likewise, the judicious use of sedatives and opiates is most important because of the well known intolerance of the older individuals to these substances. Many times one is amazed at how little of these preparations is necessary to keep the patient comfortable. Daily digital exploration will prevent troublesome adhesions.

SUMMARY

1. Geriatric gynecology is not new but is assuming more importance as the years go on.

2. The most common complaints and the physical findings, along with conservative treatment, have been sketched.

3. The proposition is advanced that the benefit of surgery can be given this group if careful preoperative, operative, and postoperative attention be given them.

MEET OUR CONTRIBUTORS

Vance A. Bradford, M.D., B.S., F.A.C.S., Oklahoma City, wrote the article on "Recent Trends in Biliary Tract Surgery" appearing in this issue. Doctor Bradford was graduated from the University of Oklahoma School of Medicine in 1938 and limits his practice to his specialty, surgery. He is a member of the Oklahoma City Surgical Society, the Royal Society of Medicine, London, and the Southwestern Surgical Congress. He was formerly with the 158th General Hospital in England. Doctor Bradford is an Alternate Delegate of the O.S.M.A.

B. C. Chatham, M.D., Chickasha, is the author of "Geriatric Gynecology" in this Journal. Doctor Chatham was graduated from Vanderbilt University in 1943 and limits his practice to his specialty, obstetrics and gynecology. Doctor Chatham is a junior fellow of the American College of Surgeons. Before practicing in Chickasha, Doctor Chatham was in the army and a resident obstetrician-gynecologist at Vanderbilt University Hospital, Nashville, Tenn.

Curtis H. Tyrone, M.D., New Orleans, La., guest speaker at the Annual Meeting, has a paper on "Clinical Features of Pelvic Endometriosis" in the October Journal. Doctor Tyrone was graduated from Tulane University in 1923. Certified by the Ob.-Gyn. Board, Doctor Tyrone limits his practice to his specialty, gynecology. He is a member of the Southern Surgical Association, Southern Medical Association, Southeastern Surgical Congress, and the American College of Surgeons.

H. S. Orr, M.D., Tulsa, wrote "The Use of Glutamic Acid Hydrochloride for Nausea and Vomiting of Pregnancy" in the October issue. Specializing in obstetrics and surgery, he was graduated from the University of Oklahoma School of Medicine in 1942. He is a member of the Oklahoma City Obs.-Gyn. Society, a past president of the Exchange Club, and a member of the Junior Chamber of Commerce. Doctor Orr is also O.S.M.A. alternate delegate.

SOUTHERN MEDICAL ASSOCIATION

November 13-16

St. Louis, Missouri

For reservations address Housing Bureau, 911 Locust St., Room 406,

St. Louis 1, Missouri

THE USE OF GLUTAMIC ACID HYDROCHLORIDE FOR NAUSEA AND VOMITING OF PREGNANCY*

H. S. ORR, M.D.
TULSA, OKLAHOMA

Nausea and vomiting of pregnancy are often a major part of care of the first trimester. Thus the obstetrician is constantly on the lookout for any additional drug or method to help in alleviating this troublesome and occasionally very serious condition. This is a report of the use of glutamic acid hydrochloride with ferrous sulfate (Gluferate, Wyeth) and a brief review of recent literature on this condition.

I have always endeavored to keep the nausea and vomiting of pregnancy at a minimum, because of the feeling that toxemias and non-healing difficulties are in proportion to the early vomiting and dietary indiscretions. As soon as pregnancy is established, we do complete blood counts; red, hemoglobin, white, differential, sedimentation rate, Wasserman, and Rh factor, basal metabolism, urinalysis, mantoux and, where indicated, chest x-ray, as well as a complete head to toe physical. All foci of infection or inflammatory areas are treated and cleared up as rapidly as possible. All cases with basal metabolism below -8 are started on thyroid daily, the dose being adjusted by the reaction and degree of clinical evidence of hypothyroidism and basal rating. Blood cholesterol is checked if myxedema is suspected.

In the first visits I emphasize to the patient that I do not want her to vomit, or even to be nauseated. Emphasis is made of the fact that there are many drugs which we can use to help her but much of the burden is on her to eat regularly and properly. She is told to follow a low fat, high protein diet, with interval carbohydrate feedings to maintain her strength, protect her liver and thus keep down nausea. No mention is made early of weight control, except in the case of obese girls who started early on Dextro-drine, usually thyroid, and exact 1000, 1200, or 1500 calorie diet emphasizing protein.

All complaining of nausea, and all with hypochromic anemia are started on Glufer-

rate (glutamic acid hydrochloride—200 mg and ferrous sulfate, dried 120 mg, Wyeth). To control the psychogenic factor, lately I have given the (Gluferate) glutamic acid and iron as a routine hematinic, telling the patient we wanted to build up her blood and this first medication should not bother her stomach, but if it does report immediately. Any who then complain are given liver concentrate five units with thiamine chloride 50 mg and pyridoxine 50 mg intramuscularly daily for three days, then as needed by the patient's request. If incomplete or no relief Nidoxital before meals, if still no relief, then Histadyl 20 mg intramuscularly daily similar to the outline of Finch, then finally intravenous glucose. The only case requiring glucose in the past year on this regime was one with a hydatid mole.

I first became interested in the action of hydrochloric acid in helping control the vomiting of pregnancy when I had a patient get good relief from her nausea and vomiting by the use of Nidoxital, Ortho, tablets, but not with Nidoxital capsules. The composition of both were the same:

Pyridoxine Hydrochloride	50 mg
dl Methionine	100 mg
Nicotinamide	25 mg
Benzocaine	100 mg
Sodium Pentobarbital	15 mg

(These are given 20 to 30 minutes before meals, and have given results similar to those reported by Hurlbutt, though the patients often complain of the cost of 25 cents per capsule).

The only difference was in the coating. The patient was next instructed to empty the capsule, with good results from the powder. From this failure to digest the gelatin capsule I thought she must be deficient in hydrochloric acid. Gastric analysis verified this. She was then given hydrochloric acid with the capsules as the tablets were no longer available and the powder tasted so badly. She then noticed that hydrochloric acid alone gave almost as much relief of nausea.

Another patient about this time was put

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on Acidulin (glutamic acid hydrochloride 200 mg) with good results. Then every other patient of the next 10 was given Acidulin with a decrease in the number of shots necessary to control nausea. One of the pharmacists called my attention to the fact that Gluferrate contained as much glutamic acid hydrochloride (200 mg) as Acidulin plus ferrous sulfate two grains and was cheaper to the patient. The switch to Gluferrate was effective, and has been made routine office procedure, with a marked decrease in the number of shots necessary to control nausea and maintain well being during the first trimester. The drug is continued until a switch is made to a calcium, phosphorus and iron combination capsule is started in fifth month.

The basic physiology of this apparent achlorhydria was discussed by Artz and Allen on a series of gastric analyses which showed a low or absent hydrochloric acid but a normal or even increased total chlorides. This would indicate neutralization of the normally formed hydrochloric acid by regurgitation of duodenal fluids according to Alvarez reverse gradients pattern. Nakai's findings were similar on a group of gastric analyses. Roberts showed that caffeine stimulated gastric secretion and Arzt used this effect in relieving nausea of pregnancy. He reports caffeine citrate grains three brought a marked increase in total and free hydrochloric acid.

Jones reports relief of nausea by galvanic stimulation of the vagus nerve, this brings in another factor which may or may not be due to hydrochloric acid availability in the stomach, and should be checked with gastric analyses. Bertling, O. W. Smith and others have suggested the beneficial effects of diethylstilbesterol treatment early in correcting this reverse gradient effect. However, these factors are hard to evaluate due to unsatisfactory laboratory controls and lack of a laboratory animal with a similar nausea and vomiting reaction to pregnancy.

Glycogen deficiency in the liver is an often stated cause of nausea and vomiting of pregnancy though I found no consistent agreeing theories as to the beginning cause of the glycogen deficiency. Carlson has shown that a drop in blood sugar is followed by marked gastric contraction, thus hypoglycemia can produce vomiting from the increased contractions.

Besides the drugs already mentioned the following reports are summarized; Page sug-

gests the use of Dramamine 100 mg every four to six hours. Weinstein et al report good results with pyridoxine, however, Hesseltine claims as good results with placebos as with pyridoxine. Dorsey uses 25 mg pyridoxine with 0.5 cc suprarenal cortex (Armour) two shots in 24 hours, then as needed. Further work with this is awaited with interest as the immediate effectiveness reported is interesting and quite dramatic to the patient.

Aside from all pharmacological and physiological management of the nauseated gravid patient is the psychic factor. Titus says, "All cases combine a definite underlying toxemia with whatever degree of neurosis that may be found incidentally, or that may result from this distressing state of ill health. The question to decide is merely which condition is uppermost, so that management may be directed accordingly." The psychosomatic handling is primarily a matter of friendly, benevolent reassurance with understanding, but no oversympathy or excusing. The patient is given a definite understanding that nausea and vomiting will simply not be allowed to persist, that there are many remedies and always one or more will work. Again with the implied threat of more shots, even intravenous, if the simpler medications do not work.

In the general maintainance of the obstetrical patient in a state of well being and warding off later complications, all possible means should be utilized in keeping her from vomiting and becoming depleted or badly nourished whether in total calories or specific elements of the diet. This maintaining of condition must usually be done at a minimum of expense. Thus along with all general corrective measures, Gluferrate is being tried as a physiologic substitution of a necessary digestive element neutralized by reverse peristalsis for which we have not found a complete mechanism or chemical etiology to correct without disturbing pregnancy.

SUMMARY

A one year trial in a moderate obstetrical practice of routine administration of Gluferrate to all anemic and/or nauseated obstetrical patients had markedly reduced the number of shots necessary to control the nausea and vomiting of pregnancy. This is used as an adjunct to controlled management, not as a correction of the basic disturbance of physiology. Economic feasibility and acceptance of dose form by all patients good. No reactions or toxic effects have been found.

CONCLUSION

Lack of free hydrochloric acid is a factor of importance in the nausea and vomiting of pregnancy. A cheap and acceptable medication is suggested as of value in control of this condition.

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MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

"How to Prevent 100,000 Cancer Deaths a Year" — Clive Howard — *Woman's Home Companion*, September, 1950.

This is a fairly good article for all of us to read. Of course the rate of early cancer detection will increase if everybody looks more thoroughly for it. But also the early cancer detection will increase if the people themselves come early for examination. Say Doctor, how long has it been since you had a thorough physical examination? Now see, don't always blame the lay people. They are human just like yourself.

"Can a Nation Afford Health for all its People?" — Rebecca West — *Ladies Home Journal*, September, 1950.

A voluminous discussion of state medicine in Britain by one of Britain's leading journalists. She tries her best to show that it is a wonderful scheme for everybody and that the medical care is greatly improved but she then rather loses her argument as she keeps on talking (which is true of a great number of people).

When she herself got sick she didn't go apply for state medical care but went to a private practitioner. Why? Because it would take to long through the government way and then she wouldn't be able to see the doctor she felt should see her condition.

In another instance she asked a sheep herder, 'What difference has the National Service made to you?', and he answered, 'Why, none.'

Following are some quotations from her article.

"If a person's time has more than a certain value it does not pay him or her to use the National Health Service. So many people are resorting to the doctors' offices and to the hospitals that the queues seem endless. Here is one instance in which the poor are actually getting less satisfactory medical attention than they had before the institution of the service, for in many outpatient departments the time of waiting is doubled or trebled and it is no joke sitting in a hospital waiting room when you are feeling ill. . .

"One physician states, 'of course I'm unhappy when my paymaster is the state which I find capable of coming between me and my patient and insisting that I give her a different treatment from which the professional knowledge of myself has prescribed.' . . .

"What is the good of the state giving a man free treatment for duodenal ulcer if he has got the ulcer through worrying about the taxes he has to pay to enable the state to give him free treatment. . .

"The part of the taxation which goes to the National Health Services takes five and one half per cent

of our National Income."

"Remember this," the author summarizes after pages and pages of weak argument for National Health Service, "a National Health Service must be a disappointment, however successful it is."

It is bound to be taken as a promise to give the whole population first-class medical and surgical treatment. Well, it can't do that. There are not enough first-class doctors, surgeons, dentists, oculists or nurses to go round, and not enough hospital beds. You are up against a natural insufficiency here; and if you quarrel with it you will have to quarrel with the same insufficiency which makes it impossible to guarantee every citizen a wife as beautiful as Elizabeth Taylor and a Park Avenue apartment. In any National Health Service a large proportion of the population will have to make do with second-rate attention and maybe some that is not so good as that.

I read a statement the other day given in jest but is quite true today. "Scientific research has shown that millions of years ago the British Isles touched the United States." Then the touch was by land and now it is touched by money to help pay a big part of their whole socialized scheme. Did we or did we not win our fight for independence from the Empire and wasn't it because of taxes that were sent there that did this country no good. Oh well, I'm no politician — just a guy that likes to think about the quirks of history.

"How Kansas Finds Country Doctors" — Harold B. Clemencko — *Look*, August 29, 1950.

A picture report of Kansas' preceptor method which apparently is just like ours but for some reason the Kansas Dean has a great deal better public relations staff than our state has, but never you mind, ours will produce just as good results as the state to the north.

"Don't Trifle With Tonsils!" — Kate Holliday — *Coronet*, September, 1950.

There are too many misconceptions about a "simple" operation that can be serious and this is a good article for the lay people to read on the subject. It gives the pros and cons in the argument and the reasons for these views.

"Surgery Fixes Ailing Hearts" — J. D. Ratcliff — *Coronet*, August, 1950.

This is a nice lay write up of newer heart surgery but like all of them by this author, he leaves the impression everything is all set and can be done routinely and another one of his traits is to build up only one or two men that can do a certain job when there are others doing the same thing.

RECENT TRENDS IN BILIARY TRACT SURGERY*

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Surgery of the biliary tract has kept pace with the general advancement of medicine in recent years. Earlier diagnosis, improved preparation, expert anesthesia, and detailed after care, have allowed considerable broadening of the indications for surgery. There is currently a trend for better clarification of the indications for operation, and for definitive procedures rather than palliative operations.

THE GALLBLADDER

Post mortem statistics show 25-30 per cent of all persons more than 60 years of age have chronic cholecystitis with stones. The presence of stones is associated with complications requiring surgery in a high percentage of cases. With the mounting number of old people in our country, cholecystic disease, like degenerative disease and malignancy, is increasing.

The common diseases of the gallbladder amenable to surgery are:

1. Gallstones which are symptomatic or asymptomatic in good risk patients. Gallstones producing symptoms in poorer risk patients.

Jejunitis followed 114 cases of cholelithiasis which were treated conservatively over a period of 10-25 years. Thirty-eight of the patients died. Five of the 38 developed carcinoma of the gallbladder and 13 died of cholecystic disease. Almost 50 per cent of the deaths were due to cholelithiasis or its complications, and the report does not take into account the symptoms accompanying the disease in the surviving patients.

Ninety percent of patients with gallstones get good results following surgery, according to Cattell of Lahey Clinic. Marshall believes that once the diagnosis of gallstones is established, surgical treatment, in the majority of cases, should be advised and instituted as early as possible. Clagett, reporting from the Mayo Clinic, states that he

is convinced that so-called innocent gallstones do not exist and that they should be removed.

2. The non-functioning gallbladder. In a discussion of diagnosis, McKell states that he does not consider a faintly shown, poorly concentrating, or poorly emptying gallbladder to be organically diseased if stones are not demonstrated. Duodenal ulcer, irritable bowel, or diarrhea, may be the cause for non-visualization, so the studies should be repeated after treatment of the particular condition hindering function. The finding of an occasional case of duodenal ulcer at operation for cholecystic disease, is reason for doing a barium meal prior to gallbladder surgery.

Properly performed duodenal biliary drainage is recommended as a diagnostic aid. The finding of cholesterol crystals and calcium bilirubinate pigment is almost diagnostic of calculus in the tract and is considered 95 per cent accurate.

The sluggish, or the spastic type of gallbladder function is a medical problem, usually only part of a generalized functional disorder.

If after repeated studies there is non-function of the gallbladder, and if there is a typical history, it means chronic cholecystitis with stones in 95-100 per cent of cases. Thus it becomes an indication for operation.

At the Mayo Clinic, 150 cases of non-functioning gallbladders who refused surgical treatment, were followed for two years. During this period, 27 per cent of them had been operated on for serious complications of cholecystic disease, such as jaundice, pancreatitis, or perforation.

3. Acute Cholecystitis. This is considered to be a sequel to calculi and chronic cholecystitis in 90 per cent of cases. In large reported series, 80 per cent have had past symptoms. Gallstones have been present for some time and the acute condition follows

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the wedging of a stone in the cystic duct.

In a series of 2,261 cases of acute cholecystitis, reported by Gowley and Harkins, perforation had occurred in 13 per cent.

Acute cholecystitis is a treacherous condition and is an indication for operation, preferably within 48 hours, if one is to avoid complications.

4. Extrahepatic, Obstructive Jaundice. Cholangitis, is largely related to inadequate drainage of the biliary tract due to common duct stone, which in turn is related to long standing calculi and disease in the gallbladder. The current trend is to explore the common duct in a higher percentage of cases than formerly.

One or more of the following conditions may be the indication for exploring the common duct:

Jaundice or history of associated jaundice.

A palpable mass in the common duct.

An enlarged or thickened common duct.

A contracted, thickened gallbladder.

Small stones in the gallbladder capable of passing.

Cystic duct stone impacted near common duct.

Coarse sediment in bile aspirated from common duct.

Pancreatitis diagnosed at operation.

Biliary tract symptoms where no gallstones are found.

As the indications for choledochostomy are broadened, the frequency with which pathology is found will tend to decrease while the good results will increase. This summary of common duct surgery from the Lahey Clinic shows the trends. In the period to 1929, 22.4 per cent of common ducts were explored, 51.7 per cent of which had stones. In the three year period 1942-1945, 45.7 per cent were explored, 37 per cent of which had stones. The reported operative mortality is 0.9 per cent.

5. A few cases of intractable chronic non-calculous cholecystitis need operation. It must be emphasized that these cases are rare and should be selected on strict criteria:

Elimination of all other causes for symptoms.

Intractability to medical treatment.

Sufficient pain to warrant relief by surgery.

Repeated abnormal Graham-Cole examinations.

O'Donnell in an analysis of 7,000 operations for chronic cholecystitis without stones,

found over one-third to be failures. In the past, statistics have shown that 30-50 per cent of gallbladder operations were done for non-calculous cholecystitis.

Poor results attributable to ill advised surgical procedures in these cases should not be allowed to discredit the good results following operations performed under proper indications.

6. Carcinoma of the gallbladder. In a report on 75 cases of carcinoma of the gallbladder of whom 65 were operated, Sainburg and Garlock had only one case survive more than three years. The incidence of gallstones in this series of cases was 73.3 per cent. The conclusions of these surgeons was that there is overwhelming evidence pointing to gallstones as a predisposing factor in carcinoma of the gallbladder. Their experience was that when carcinoma is diagnosed clinically, it is virtually incurable. It is recommended that even asymptomatic calculous gallbladders be removed on these grounds alone.

STRICTURES OF THE COMMON DUCT

Most of the strictures of the bile ducts are the result of operative injury. Warren Cole, in discussing this subject before the American Surgical Association in 1948, points out some of the causes of strictures and presents some of the methods of repair:

A. Transfixion with a needle.

B. Ligation with cystic duct.

C. Ligation of the cystic duct too close to the common.

D. Chronic fibrosing pancreatitis.

E. Cholangitis

F. Ulceration of the wall by stone.

G. Abscess or local collection of bile.

No one method is uniformly successful for repair of common duct defects, and no one method is applicable to all cases. Until recently the methods used were variations of three principles:

1. Suturing end to end.

2. Suturing to other part of alimentary tract.

3. Bridging the defect with adjacent tissues or with foreign material.

The simple method of resecting and reconstructing over a T tube is quite satisfactory. This figure taken from Maingot, shows the best method in Sections 2 and 4 of the diagram.

If the distal end can be found, the duodenum and head of the pancreas can almost always be mobilized sufficiently to bring the distal end of the common duct up to meet the proximal.

For some of the more extensive defects, Cole uses a mucosal graft from the end of a Roux Y arm of jejunum. The mucosal graft is made by dissecting the cuff of muscularis free. This is then inserted up into the structured area after a catheter is first put in. In Cole's report of 63 operations, there were 86 per cent good results with local repairs, and 78 per cent good results with the Roux Y mucosal graft.

Arthur Allen presents a modification of this principle as shown by the following two diagrams from *Annals of Surgery*, 1945.

For cases of complete absence of any duct below the liver, Longmire, in January, 1948, reported a method whereby partial hepatectomy is carried out to discover some intrahepatic duct to use in the anastomosis. The following six figures from *Surgery* August, 1948, show the anatomy of the operation.

PANCREATIC DUODENAL RESECTION

There is generally an extension of radicalism in the surgical attack on cancer. The surgeon removes, not only the organ primarily involved, but adjacent organs whose blood supply is sacrificed in the removal of the malignancy.

Ackerman points out that 90 per cent of untreated cases of carcinoma of the pancreas die within a year. The symptomatology is a function of the extension of the malignancy. There is weight loss, vague indigestion, gaseous distention, and pain. Finally there is jaundice and a palpable gallbladder. Diagnosis of the advanced case is well outlined.

Clinical	(Progressive jaundice
	(Pain
	(Weight loss
Laboratory	(Rising icteric index
	(Large amounts of bilirubin in urine, none in the stool
	(Urobilinogen repeatedly absent in the urine

Whipple first reported this operation in 1935 and in recent years series of cases have been reported by Whipple, Orr, Waugh, Clagett, Bartlett, Cattell, Trimble, Brunschwig, and others.

The operation is done for carcinoma of the 1. head of the pancreas, 2. ampulla, 3. duodenum, 4. lower common duct. The anatomy of the region dictates the technique. Various techniques of anastomosis have been devised as shown by this summary of diagrams from Maingot's book.

Brunschwig, in 1937 reported one of the first successful operations and 10 years later reported the follow-up on seven consecutive cases without operative mortality.

Cattell reported the follow-up on 61 cases subjected to this operation during 1942-1948. These cases were 34 per cent of the total number of 165 patients studied. The table from *Annals of Surgery* June, 1949, shows the operative deaths based on the site of the lesion. In one category of 20 patients the mortality was five per cent, in another 16.7 per cent, and in lesions of the duodenum and common duct 14.3 per cent. Of 27 patients having resections for carcinoma, 30 per cent survived three years or more. Of 12 patients followed for five years or more, three showed no evidence of recurrence.

Charles Child at New York Hospital, reporting on 22 resections in March, 1948, *Surgery*, outlines certain preferences in technique. The reproductions of figures four to six show some of the anatomical relations in the course of the resection and the preferable anastomoses he cites.

It is yet too early to evaluate this surgery on the basis of five year survivals. The possibility of surgical cure of carcinoma of the pancreas lends additional stimulus to early diagnosis. The early diagnosis should be based on pain, anorexia, weight loss, and exploration.

Ackerman states that it is to be hoped, in view of the somewhat encouraging results of surgery, that a more concerted effort will be made to bring patients with questionable carcinoma of the head of the pancreas to the experienced surgeon. It should be stressed that the patient with the question of cancer should not be observed over a long period but should be explored promptly.

CONCLUSIONS

1. The indications for cholecystectomy and choledochostomy are being clarified.
2. The methods of repairing defects in the extrahepatic biliary ductal system are being extended, using living tissues.
3. Pancreaticoduodenal compound resection for carcinoma of that region is being evaluated.

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Pediatrics
HOWARD C. HOPPS, M.D. AND WILLIAM BRADFORD, M.D.
OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: Today we are privileged to utilize this conference, not only for student teaching but as a part of the postgraduate program in pediatrics. We are especially glad to have a distinguished guest lecturer, Dr. Bradford, to come and discuss the clinical aspects of this case with us. So many of our clinical pathologic conferences concern individuals in the seventh or eighth decades who have lived a reasonably full life, finally succumbing to the ravages of degenerative disease, or perhaps dying of a malignant neoplasm. Our case for today is in sharp contrast to that. I will ask Dr. Strenge to introduce Dr. Bradford.

DR. STRENGE: Thank you, Dr. Hopps. I am indeed pleased to introduce Dr. William Bradford, one of my former teachers, for whom I have always had the very greatest respect. He has demonstrated his ability for us again during the past few days, as I am sure the men who attended our postgraduate course will attest. Dr. Bradford is Professor of Pediatrics and Assistant Dean of the University of Rochester School of Medicine. He is the author of a considerable portion of the Section on Communicable Diseases in one of our outstanding textbooks of pediatrics. In addition to being an excellent teacher he is a very skilled practitioner of medicine, a combination of talents which will, I am sure, make for a most interesting conference.

PROTOCOL

Patient: D. E. J. Three year negro male.

Chief Complaint: This three year old negro male was reportedly in good health until two days prior to admission to Childrens Hospital. On the morning of this day he awoke being restless, irritable, and with fever, the degree of which is unknown. He vomited several times and asked for ice water, which he drank but did not retain. He seemed somewhat irrational, dozing at intervals. His condition remained essentially unchanged throughout this day and night. On the following day he was first seen by his local physician, at which time his temperature was 103°. He was given penicillin and "fever powders", but continued to have

fever and vomited everything he ate or drank. His delirium persisted and he developed diarrhea with approximately 10 liquid, yellow, stools. He began to have a dry nonproductive cough. His condition appeared to be growing progressively worse and at 2:00 a.m., on the second night, he developed rapid, noisy, respirations. The patient was brought to Childrens Hospital and admitted on the morning of this second day of present illness.

Past History: This child was delivered at University Hospital following an essentially normal pregnancy. His birth weight was 6 lbs. 13 oz. There had been no feeding problem or other difficulties. He is said to have had supplementary vitamins in adequate amounts. He had been immunized for small pox and had measles at the age of two.

Family History: The mother was 29, living and well; father 35, living and well. There were six siblings — two to 14 years old, living and well. The mother was said to have had syphilis, but was treated during pregnancy. Repeated serologic tests for syphilis were negative in both the child and mother.

Physical Examination: Temperature was 105° (R) and respirations 48. The child appeared well developed and well nourished for his age, but acutely ill. Respirations were not only rapid but labored. There was substernal retraction and slight stridor. The child was irrational, thrashed about in bed, kicking, rolling and biting at the examiner. Pupils were small, but reacted to light and accommodation. Tympanic membranes could not be visualized for lack of cooperation. Tongue, oral mucous membranes and pharynx were uniformly a deep vivid red from hyperemia. Lips were dry and ulcerated. There was some flaring of the costal margins with respirations. The lungs "were not resonant to percussion". Breath sounds were increased in intensity and bronchial in character, especially over the left lung field. There were sonorous inspiratory rales over the left lung field. The remainder of the physical examination was not remarkable.

Laboratory Data: There was a heavy trace of protein, three to four RBC's h.p.f.,

and innumerable granular casts in the urine. Hemoglobin was 11.5 gm. per cent; RBC's 3.93 cu.mm., and WBC's 8,500 cu.mm., with 32 segmented neutrophils, six myelocytes, four juveniles, 38 stabs, two blast forms, two eosinophiles, eight lymphocytes and eight monocytes. Spinal fluid findings were within normal limits except for the presence of many fresh red blood cells, presumably due to trauma of the puncture. Mazzini test was negative. Culture from the nasopharyngeal membranes revealed staphylococcus aureus. No ova or parasites were found upon stool examination.

Chest radiograms revealed, "heart to be of normal size, shape and position. Both hilar shadows were enlarged and there were linear areas of infiltration in the right upper and lower lung fields suggesting an acute respiratory infection."

Hospital Course: The patient received 500,000 units of penicillin (aqueous) immediately and subsequent doses of 200,000 units every three hours. He was given continuous steam inhalations. His condition remained critical, but the following morning his temperature had decreased to 100.6° (R). He appeared somewhat more rational and seemed to have somewhat less respiratory difficulty. However, about noon on the second hospital day, the respirations gradually became progressively weaker and shallower. In spite of continuous oxygen, artificial respiration, coramine, and intracardiac epinephrine, the patient continued to fail rapidly and expired approximately 30 minutes later.

CLINICAL DISCUSSION

DR. BRADFORD: Dr. Streng, Dr. Hopps, and members of the Oklahoma School of Medicine. I assure you it is a pleasure for me to meet you and to have this short period with you.

You each have exactly the same factual information about this case as I, and I shall not re-read the entire protocol. This three year old colored male presented himself with what may be presumed to be a recent illness. His course was a stormy one. He had awakened a day before admission, restless, irritable, febrile, thirsty and vomiting. This condition persisted even after the local physician was called. Then the sensorium became altered; he had delirium. That could come, as it often does in children, from fever alone. It could actually represent some change in the central nervous system, however. There was diarrhea with some liquid stools for a day then development of a cough. With this there was gradual increase in

the severity of the immediate illness to the point where this respiratory trouble began to dominate the picture. Respirations became more rapid and noisy, presumably representing some type of stridor. The protocol doesn't say whether the stridor was inspiratory, expiratory, or both — this may be significant. I see nothing in the past history or in the family history which is pertinent to the present illness.

From the physical examination you will note that the temperature was quite high, 105°. The respiratory rate was rapid, even for a three year old child. Obviously there was air hunger. The well developed and well nourished status is in keeping with the story of an acute, recent illness. The substernal retraction with stridor may be related to the patient's irrationality and thrashing about the bed. Sometimes a patient will exhibit extreme restlessness and violent movement when they can't get enough oxygen. This is particularly true with obstruction of the respiratory tract. As you know, restlessness is one of the very early signs of laryngeal obstruction, even preceding by a considerable interval the occurrence of cyanosis. Chevalier Jackson used to say that in cases of laryngeal obstruction restlessness was the sign indicating surgical relief. Of course, restlessness may be on a different basis, perhaps it may be cerebral. The pupils were small, reacted to light and accommodation. It would be interesting to know what the eye grounds showed, but apparently even the ear drums could not be seen because of the patient's non-cooperative state, so it is unlikely that one could get a glimpse of the eye grounds. The breath sounds were increased in intensity and bronchial in character over the left base. There were some inspiratory sonorous rales heard by the examiner when he listened over this area. I should like to know about eye signs here, the external ocular muscles for instance. I assume that they were normal, however. Also, I would like to know specifically about the reflexes, especially the superficial ones. I assume that they were normal too, because it says the remainder of the examination was not remarkable. In dealing with delirious people, especially children, examination of external ocular muscles and neurologic reflexes is very important for, as you know, disturbances of sensorium plus changes in ocular muscles and altered superficial reflexes constitute the important triad in diagnosis of encephalitis.

Laboratory data contributes very little in

a positive way. The normal leukocyte count and the relatively normal proportion of granulocytes to lymphocytes is rather significant in relationship to the child's fever. It could suggest an infection of viral origin, rather than a pyogenic one. On the other hand, the child might have had a pyogenic infection of such marked degree that there was failure to respond. As you know, fulminating staphylococcal septicemia frequently kills without producing leukocytosis. As a matter of fact, the white count may be depressed. A culture from the nasopharynx revealed staphylococcus aureus. Staphylococcus aureus produces one of the most severe types of pneumonia in small children, particularly infants. This child is a little bit beyond the age at which this sort of infection usually occurs, and yet the recovery of staphylococcus aureus could be very significant, particularly if it were recovered in pure culture. A blood culture might have been very helpful. The chest x-ray shows just the sort of changes one would expect from an acute respiratory infection in a small child. A three-year-old child can succumb to pneumonia infection within three days and not have very much show in the x-ray.

I have no comment about the hospital course and treatment. In spite of continuous oxygen, which is excellent therapy under those circumstances, the progress was quickly downhill as indicated. Now that we have reviewed this data, what is the patient's diagnosis? Well, the high fever is obvious evidence of involvement of two systems, the respiratory tract and the central nervous system tract. Staphylococcus aureus was recovered from the nasopharynx and it may or may not be a significant pathogen. It can produce one of the worst infections of the respiratory tract in a young child. One might also consider that the baby had an overwhelming virus infection with superimposed staphylococcal infection producing a terminal pneumonia. The spinal fluid contained only red blood cells and these were attributed to trauma. This could possibly have been on the basis of a hemorrhage in the central nervous system or in the subarachnoid space. I have seen one or two cases similar to this which developed hyperthermia and in which the ultimate finding was hemorrhagic encephalitis, despite normal spinal fluid findings. I believe the most likely diagnosis is *viral infection with a superimposed staphylococcal respiratory infection*.

ANATOMIC DIAGNOSIS

DR HOPPS: At the time of autopsy, the child impressed us as a well developed, well nourished negro male, who appeared to be considerably dehydrated. As we explored the various serous cavities our impression was confirmed by finding the tissues to be dry and rather sticky; there was less than the normal amount of fluid present in the peritoneal and pleural cavities. Abdominal viscera were not remarkable except that the liver was slightly enlarged and the spleen moderately enlarged. The lungs were slightly lumpy and moderately increased in weight. As we opened the trachea and bronchial tree we encountered the most important lesions. The trachea, as far up as we examined, was almost filled by a tenacious, green, purulent exudate. This extended down into the bronchial tree also — as far as one could dissect. On cut surfaces of the lungs purulent exudate could be expressed from small bronchi and bronchioles. I have sections which demonstrate the nature of this *purulent and necrotizing laryngotracheal bronchitis*, which was the primary disease. Along with this there were the changes that we so often see in a septic state and which actually form the basis for death under these conditions. First of all, in infectious disease there is the direct and immediate effect of infectious organisms. This is demonstrated here by the necrosis and suppuration of the respiratory passages and extending to and including bronchioles. As a second effect of this infection, there was the widespread degenerative change from the bacterial toxins reflected in marked parenchymatous degeneration, most evident in the liver, heart, and kidneys, but present in all tissues. There was edema of some of the tissues, despite dehydration, particularly in the brain. I think that these degenerative changes, with edema, were responsible for the central nervous system manifestations. There was no evidence of meningitis. A third effect of this septic state was the result of defensive reactions — hyperplasia of the spleen, lymph nodes, and hyperplasia of the bone marrow, with a marked shift to the left. Those were the main changes, all related to this purulent laryngotracheal bronchitis which seems to have been on a basis of staphylococcus aureus infection. We were unable to demonstrate effects of a pre-existing viral infection.

GENERAL DISCUSSION

DR. BRADFORD: This case illustrates the important part that hemolytic staphylococ-

cus aureus can play in a fulminating infectious disease, particularly in children and infants. It is one of the important bacterial pathogens in production of pneumonia and empyema, and especially lesions of the pulmonary system in the newborn. I became interested in what we call laryngotracheal bronchitis years ago. When I first came to Rochester these were all diagnosed as laryngeal diphtheria. We learned to laryngoscope many children with obstructive respiratory lesions resembling laryngeal diphtheria, tak-

ing cultures from the involved area. We used to get staphylococci from many of them, hemolytic strep from quite a few, and from some nothing. Staphylococcus works very effectively with viruses, e.g. measles virus, chicken pox virus, etc., and is very often secondary to one of these. I think another lesson here is the relation between the white count and temperature. Do not be confused by a normal or leukopenic white count in dealing with an overwhelming staphylococcal infection.

MEDICAL ABSTRACTS

CHRONIC TOXICITY OF THIOMERIN COMPARED TO OTHER MERCURIAL DIURETICS. Capps, R. T., Kozelka, F. L., and Orth, O. S., Dept. Pharm., Univ. Wisconsin Med. School, Madison, Wisc., *Proc. Soc. Exp. Biol. and Med.*, 74:511, July, 1950.

While addition of a thiol group to mercuriophylline (producing a substance of the same order and similar chemical composition as Thiomerin) definitely reduces the cardiotoxic effects of intravenous administration, it at the same time appears to increase the chronic toxicity of Thiomerin when compared to that of other mercurial diuretics. This was shown by the authors in their study on rats, as they observed a definitely higher incidence of delayed deaths from Thiomerin. This report confirms others both clinical and in animal experimentation, in demonstrating greater toxicity of Thiomerin as determined by renal clearance studies and greater numbers of deaths in animals.—Robert M. Becker, M.D.

A METHOD FOR THE EVALUATION OF THE EFFECTS OF DRUGS ON CARDIAC PAIN IN PATIENTS WITH ANGINA OF EFFORT — A STUDY OF KHELLIN (VISAMMIN). Greiner, T., et al. (Dept. Pharm., Cornell Univ. Med. Col., N.Y.) *Am. J. Med.* 9:143, August, 1950.

A simple but critical method of evaluating effects of various drugs on angina pectoris is described. It is based on a "daily report card" recording of data with careful placebo control. For further details the original article should be referred to or a reprint requested. This relatively fool-proof method was used to test the efficacy of khellin (visammin), recently described by Anrep and co-workers as highly effective in abolishing pain or reducing frequency and severity of attacks in 90 per cent of patients with angina pectoris. The results of Greiner's and co-workers' more accurate testing, however, revealed that khellin had no greater effect than the lactose placebos in the control of pain of the angina of effort.—Robert M. Becker, M.D.

THE CONTINUOUS 12-HOUR NOCTURNAL GASTRIC SECRETION IN NORMAL INDIVIDUALS AND IN PATIENTS WITH DUODENAL ULCER AFTER A 24-HOUR FAST. Levin, E., Kirsner, J. B., and Palmer, W. L., Dept. Med., Univ. Chicago Clinics, Chicago. *Gastroenterology* 15:454, July, 1950.

Studying patients' gastric secretion at the end of a 24 hour fast, the authors sought to eliminate the gastric and intestinal phases of gastric secretion and dealt only with the basal gastric secretion in comparing normal

and duodenal ulcer patients. It was found that under these basal conditions the duodenal ulcer patient secreted approximately four times as much free HCl as normal individuals, it was concluded that these findings supported Dragstedt's concept that hypersecretion is dependent on increased vagal activity.

—Robert M. Becker, M.D.

DIABETIC STATE WITH LIPAEMIA AND HYDROPIIC CHANGES IN THE PANCREAS PRODUCED IN RABBITS BY CORTISONE. Kobernick, S. D., and More, R. H. Path. Inst. McGill Univ., Montreal, Canada. *Proc. Soc. Exp. Biol. & Med.*, 74:602, July, 1950.

Further evidence pointing to the potential dangers of indiscriminate use of Cortisone (applies also to ACTH), appears in this report. When rabbits were given 10 mgm of Cortisone twice daily intramuscularly for 12 days they were found to have hyperglycemia, hyperlipaemia with obvious pathological changes (hydropic degeneration) in the islet cells of the pancreas, especially in the insulin-producing beta-cells.

—Robert M. Becker, M.D.

TIME ACTION OF GLOBIN INSULIN COMPARED WITH THAT OF PROTAMINE INSULIN MODIFICATIONS. Colwell, A. R., Rohr, J. H., and Reeb, B. B. Dept. Med., Northwestern Univ. Med. School, Chicago. *Arch. Int. Med.*, 86:178, August, 1950.

In patients with diabetes mellitus, the blood sugar depressing effects of globin insulin, NPH 50 (crystalline protamine insulin Hagedorn) and 2:1 mixtures of regular and protamine zinc insulin were compared. Using a single hypodermic injection of 60 units of each type and following the blood sugar levels every 8 hours pre- and post-injection, the authors found that there was little difference in action of these three intermediate acting insulins. In diabetes of moderate severity, requiring 40 units or less a day, they have found that ideal management could be attained with a single daily injection of protamine zinc insulin. In severe diabetes, with requirements between 40 and 80 units of insulin daily, best control has been found with the use of one of these intermediate acting insulins like globin insulin, NPH 50, or 2:1 regular: protamine zinc insulin mixtures. The use of straight protamine zinc insulin in patients requiring more than 40 units per day was accompanied by poor control of post prandial hyperglycemia during the day and/or hypoglycemia reactions during the night.—Robert M. Becker, M.D.



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President's Page

Within the next few days a nation wide advertising campaign will be launched by the American Medical Association. The cost of such a program will be \$1,110,000. This certainly seems like a lot of money, but it is a small price to pay for the privilege of continuing the present system of American Medicine. This program represents months of careful planning and is being conducted during the month of October which is only a short time before the November election; this in itself is a most excellent idea.

The cost of this program will be borne by approximately 144,500 doctors who are determined to alert the American people to the dangers of Socialized Medicine and to the threatening trend toward State Socialism in this country; a question to be given serious consideration before going to the polls to vote in November. Some 11,000 daily and weekly newspapers will carry this program. This no doubt, is the broadest coverage newspaper advertising of the year. The Press throughout the country, with few exceptions, has come out boldly as opposed to any governmental control of the practice of medicine. Thus, this seems to be one way of saying "thanks!". In addition to the newspapers, a majority of the leading magazines and the radio stations throughout the nation will participate in the campaign.

This program will attempt to make the American people conscious of prepaid insurance which is a means towards taking the economic shock out of illness, thereby increasing the availability of good medical care through the medium of voluntary health insurance.

This entire campaign will be greatly augmented by the tie-in advertising program of many commercial insurance companies as well as numerous non-profit plans throughout the country. It is earnestly hoped that the doctors all over our nation will realize that this is their program and, therefore, should give it every possible encouragement and emphasis in their own communities. This is a "grass roots" advertising campaign directed to all the people of America whether they live in great cities, small towns or villages. If this program could be condensed into one principle idea, it would be to strengthen the basic American ideal of individual freedom of opportunity under a free economy as opposed to the alien idea of government regimented economy. We have already given it our financial aid so let's give it our moral support and make it a huge success.



President

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FIFTY YEAR PIN PRESENTED TO DOCTOR BARRY, PICHER

In a presentation ceremony at Miami August 17, J. R. Barry, M.D., Picher, was presented a 50 Year Pin. Doctor Barry's pin was presented by his son, George N. Barry, M.D., Oklahoma City.

Doctor Barry was born in Litchfield, Ill. in 1870. Before graduating from American Medical College in St. Louis in 1899, Doctor Barry attended Northern Illinois Normal at Dixon, Illinois. He practiced in Carterville, Missouri for 20 years before coming to Picher. Doctor Barry also has one daughter in addition to his son in Oklahoma City.

George N. Barry, M.D., Oklahoma City (right) pins a 50 Year Pin on his father, J. R. Barry, M.D., Picher (center) while V. K. Allen, M.D., Tulsa (left), guest speaker at the meeting looks on.



A.M.A. INTERIM SESSION SLATED FOR CLEVELAND

Designed primarily for the general practitioner the Fourth Clinical Session of the American Medical Association will be held in Cleveland, December 5-8, 1950.

Scientific sessions and the scientific and technical exhibits will be presented in the Cleveland Municipal Auditorium. Meetings of the House of Delegates will be held in the Statler Hotel. These sessions of the body elected to govern the affairs of the A.M.A. are attracting more and more non-delegate physicians each year.

Outstanding clinical teachers with recognized ability as speakers will headline the scientific demonstrations. Actual cases will be presented and discussed. Diagnosis, treatment and preventive measures as they fit into daily practice will receive the greatest attention.

Each clinical session will be limited to an attendance of 100 physicians. These small groups will make it possible for the general practitioner to enter actively into the discussion and to inquire about his own cases. Leading men in each of the fields under discussion will be available to help with the problems presented.

Once again color television will take its place on the program. A schedule of surgery, clinical treatment and examination will be telecast from the Western Reserve School of Medicine to the Auditorium. It will be sponsored by Smith, Kline and French Laboratories.

The annual General Practitioner Award has come to be regarded as one of medicine's highest honors and a definite step toward increasing the recognition of the family doctor. This year's selection will be made at the Cleveland meeting.

The steadily climbing registration of general practitioners at the clinical sessions and the comments of those participating indicate these meetings are valuable means of keeping abreast of developments in medicine. It is hoped that a record number of physicians will take advantage of the opportunity in December to attend.

ATTENTION SECRETARIES!

"Medical Societies Around the State" had to be omitted in the October issue because so many County Societies did not meet during the summer. County Secretaries are urged to send the Journal reports of their meetings each month so that each county society can be given notice in the column.

TRAUMATIC SURGERY INCLUDED IN POSTGRADUATE COURSES

University of Oklahoma School of Medicine will open its calendar year for 1950-51 with its first course for state doctors aimed at preparation for defense against atomic warfare. The Oklahoma State Medical Association, the Oklahoma State Department of Health, and the Office of Postgraduate Instruction of the University of Oklahoma School of Medicine are combining facilities to hold this course in traumatic surgery at the School of Medicine October 2, 3, 4, 5 and 6.

Other courses scheduled for the fall semester include: CARDIOLOGY November 15, 16 and 17 TULSA, OKLA. PEDIATRICS December 6, 7 and 8 School of Med. INTERNAL MED. Jan. 11, 12 and 13 School of Med. OB-GYN SOCIETY MEETING Jan. 20 School of Med.

Regional Postgraduate Meetings

One-day regional postgraduate meetings are being scheduled in eight centers in the State by the Office of Postgraduate Instruction of the University of Oklahoma School of Medicine. The meetings which have been scheduled through January, 1951, are as follows:

Ada, (Topic to be decided later), December (exact date to be decided later).

Bartlesville, PEDIATRICS, November 23.

Clinton, PSYCHIATRY, October 19; GASTROENTEROLOGY, January 18.

Durant, CARDIOLOGY, October 11; PEDIATRICS, December 20.

Enid, DERMATOLOGY, October 26; UROLOGY, January 25.

Lawton, CARDIOLOGY, October 19; TRAUMATIC SURGERY, January 11.

Muskogee, TRAUMATIC SURGERY, October 25; ABDOMINAL SURGERY DIAGNOSIS, January 24.

Woodward, GASTRO-INTESTINAL PROBLEMS, October 5; SURGERY, November 16.

HEALTH DIRECTORS NAMED

Oklahoma State Department of Health reports several new district superintendents and directors of health. They are: Jean C. Antonmattei, M.D., District Superintendent, Kiowa and Tillman Counties; Emil Stratton, M.D., District Superintendent, Caddo, Stephens and Jefferson Counties; A. M. Clarkson, M.D., Idabel, County Superintendent, Choctaw and McCurtain Counties; William H. Coe, M.D., McAlester, County Superintendent, Pittsburg, McIntosh and Latimer Counties; M. L. Peters, M.D., Okemah, Director, Okfuskee County; and J. C. Canada, M.D., Director, Pontotoc, Murray and Hughes Counties.

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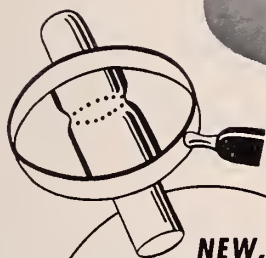
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OBITUARIES

J. S. STULTS, M.D.

1864-1950

John Samuel Stults, M.D., 85, practicing physician for 56 years, died March 9, 1950 in an Altus hospital after six days' illness.

Doctor Stults, who was the son of Dr. and Mrs. William Stults, was born in Dallas County, Texas, June 29, 1864. He received his medical training at Tulane and at Missouri Medical College, St. Louis, where he was graduated in 1894. He practiced in Texas until 1902, when he moved to Oklahoma and located at Olustee. He moved to Altus in 1926 where he practiced until his death.

Doctor Stults was a member of the Baptist Church. At the time of his death, he was senior deacon of the First Baptist Church of Altus and teacher of the Senior Men's Sunday School class. He was an Honorary member of the Oklahoma State Medical Association.

Survivors include his widow, two sons, W. P. Stults, Mountain Home, Tennessee; and S. M. Stults, Houston, Texas; one daughter, Mrs. C. G. Woodward, Comanche, Oklahoma; a brother, C. W. Stults, Raymondville, Texas; and a sister, Mrs. B. R. Wall, Grapevine, Texas.

CLYDE RAMEY, M.D.

1892-1950

Clyde Ramey, M.D., who retired from practice because of ill health in July, 1949, died August 17, 1950. He was 57 years old.

Doctor Ramey moved to Tulsa in 1926 after receiving his medical degree from the Arkansas Medical School. He was active in Medical organizations and in Holy Family Catholic parish. He was born November 7, 1892.

Surviving are his widow, Mary, and two sons, James Edward Ramey of the home, and Clyde J. Ramey, Jr., Eugene, Oregon.

HARDIN WALKER, M.D.

1872-1950

Hardin Walker, M.D., 78, pioneer doctor of Harper County, died August 10 in Shattuck. He was a resident of Buffalo.

Doctor Walker was born at Greencastle, Mo., March 29, 1872 and graduated from M.S.B. Medical College at St. Louis in 1899. He also attended Chillicothe Normal school two years and taught three years before entering medical school.

He first practiced in Readout, then Rosston before moving to Buffalo. From April, 1917, to June, 1919, Doctor Walker served with the A.E.F. in France.

He was a member of the Scottish Rite and Shrine,

Eastern Star, Odd Fellows and Rebekahs. He was one of the organizers of the first Methodist church in Harper county.

JOHN HICKS WALKER, M.D.

1904-1950

John Hicks Walker, M.D., 46, formerly of Muskogee, died July 22 at Shiprock, New Mexico.

Doctor Walker was born April 11, 1904. He graduated from Harvard and came to Muskogee about 1938. Doctor Walker was in the service during World War II but was discharged in 1943. Later he went to Talihina and moved to Shiprock about a year ago. He was in charge of the Navajo Hospital at White River, New Mexico.

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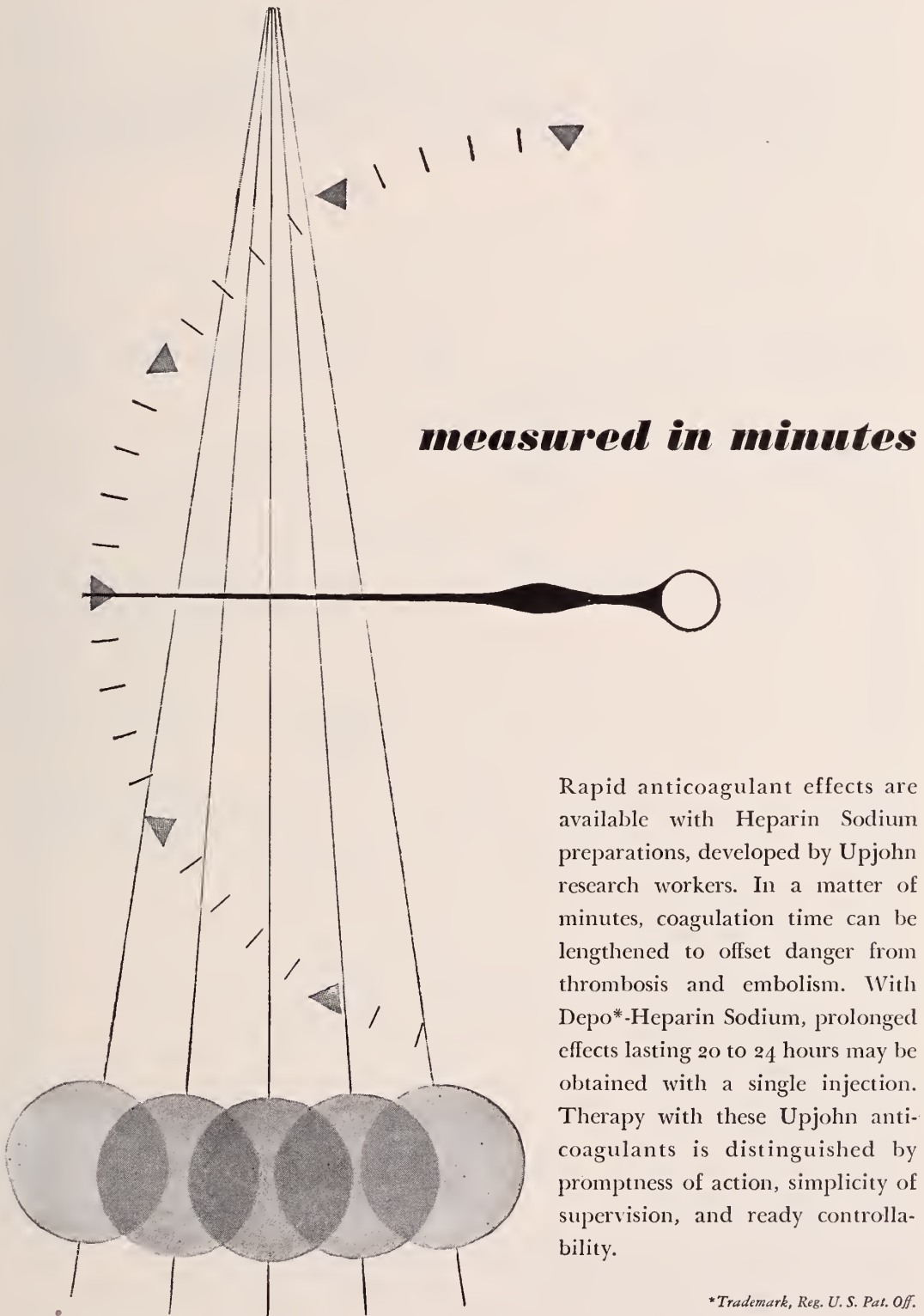
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Amos Christie, M.D., Prof. of Pediatrics, Vanderbilt University, Nashville, Tenn.

William Demeshek, M.D., Prof. of Clinical Medicine, Tufts College Medical School, Boston, Mass.

O. Spurgeon English, M.D., Prof. of Psychiatry, Temple University, Philadelphia, Pa.

Nichols J. Eastman, M.D., Prof. of Obstetrics, Johns Hopkins University, Baltimore, Md.

L. Kraefer Ferguson, M.D., Prof. of Surgery, Graduate School of Medicine, Univ. of Pennsylvania, Philadelphia, Pa.

L. H. Gorlund, M.D., Clinical Prof. of Radiology, Stanford University, San Francisco, Cal.

John H. Gibban, Jr., M.D., Prof. of Surgery and Director of Surgical Research, The Jefferson Medical College, Philadelphia, Pa.

Julius Lempert, M.D., Director of Surgery and Post Graduate Teaching, Lempert Institute of Otolaryngology, New York City.

Francis W. Lynch, M.D., Clinical Prof., Division of Dermatology, University of Minnesota, St. Paul, Minn.

Robert B. McIver, M.D., Chief, Dept. of Urology, Duval Medical Center and St. Vincent's Hospital, Jacksonville, Fla.

Robert A. Rass, M.D., Associate Prof., Obstetrics and Gynecology, Duke University, Durham, N. C.

Byron Smith, M.D., Assistant Prof., Ophthalmology, New York University College of Medicine, New York City.

Dr. Howard B. Sprague, Associate Physician at the Massachusetts General Hospital and Clinical Associate in Medicine at Harvard Medical School.

George H. Thiele, M.D., Co-Chief, Colon Surgery, Kansas City General Hospital, etc., Kansas City, Mo.

O. E. Van Alyea, M.D., Associate Clinical Prof., University of Illinois, Chicago, Ill.

Nathan A. Wamack, M.D., Prof. of Surgery and Head of Dept. of Surgery, State University of Iowa, Iowa City, Iowa.

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2. Terramycin may be well tolerated even when other antibiotics are not.²

suggested for: acute pneumococcal infections, including lobar pneumonia, bacteremia; acute streptococcal infections, including erysipelas, septic sore throat, tonsillitis; acute staphylococcal infections; bacillary infections, including anthrax; urinary tract infections due to E. coli, A. aerogenes, Staphylococcus albus or aureus, and other Terramycin-sensitive organisms; acute brucellosis (abortus, melitensis, suis); hemophilus infections; acute gonococcal infections; lymphogranuloma venereum; granuloma inguinale; primary atypical pneumonia; typhus (murine, epidemic, scrub); rickettsialpox.

Dosage: 2 to 3 Gm. daily by mouth in divided doses q. 6 h. is suggested for acute infections.

Supplied: 250 mg. capsules, bottles of 16 and 100;
100 mg. capsules, bottles of 25;
50 mg. capsules, bottles of 25.


1. King, E. Q.; Lewis, C. N.; Welch, H.; Clark, E. A., Jr.; Johnson, J. B.; Lyons, J. B.; Scott, R. B., and Cornely, P. B.: J. A. M. A. 143:1 (May 6) 1950.

2. Herrell, W. E.; Heilman, F. E.; Wellman, W. E., and Bartholomew, L. A.: Proc. Staff Meet. Mayo Clin. 25:183 (Apr. 12) 1950.

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HAVE YOU HEARD?

M. K. Braly, M.D., formerly of Mooreland, left September 1 for active duty with the navy. He reported to Oceanside, Calif.

M. A. Connell, M.D., Picher, explained the operation of the Ottawa County Red Cross Blood Bank Program at a meeting of the Picher Lions Club.

J. M. Perry, M.D., formerly of Custer City, is now practicing in Duncan.

E. Bryant Woods, M.D., Durant, was honored recently on his birthday when employes of the Evergreen Sanitarian entertained at a picnic.

A. L. Johnson, M.D., El Reno, was recently featured in a "Know Your Neighbor" column in his home town paper.

C. E. Williams, M.D., Woodward, spoke on the 12 Woodward Scouts' trip to Valley Forge at a meeting of the Lions Club of that city.

J. G. Wood, M.D., Weatherford, spent a two weeks fishing trip in San Diego in August.

N. F. Wynn, M.D., Edmond, is constructing a new clinic in Edmond.

E. H. Shuller, M.D., McAlester, is program chairman for the McAlester Chamber of Commerce.

E. D. Greenberger, M.D., McAlester, was host to the Oklahoma State Radiological Society when it met recently for a two day seminar.

S. L. Whitely, M.D., formerly of Cedarville, Georgia, is now associated with the Colwick Clinic, Ada. He served his internship at St. Anthony's, Oklahoma City.

James W. Parker, M.D. and William G. Husband, M.D. recently held open house at their new clinic in Elk City.

E. A. Walker, M.D., Yukon, left August 1 for Camp Pendleton, Calif. for active duty with the U. S. Marine Corps 20th Infantry Reserve Battalion.

M. A. Neumann, M.D., Okarche, spent several weeks this summer vacationing at Taos, New Mexico.

W. R. Coyner, M.D., and Ralph Payne, M.D., Edmond, are building a new clinic in that city.

Phillips R. Fife, M.D., Guthrie, spoke to the Guthrie Rotary Club on socialized medicine recently.

P. J. Devanney, M.D., Sayre, and his family spent their vacation in California.

C. F. Moore, M.D., Durant, recently visited his son in Lima, Peru, South America. His son is a pilot for Braniff Airlines flying from Lima to Rio de Janeiro.

CLASSIFIED ADS

FOR SALE: Profex X-ray, 25 MA. With upright fluoroscope. Very reasonable. Write Key R, care of the Journal.

FOR SALE: Office equipment. Would like for some young doctor to come and take my place and my office supplies. Would sell my equipment and turn over my practice to him. Write Key B, care of the Journal.

PHYSICIAN WANTED: Unusual opportunity for young general practitioner in southern Oklahoma oilfield community. Write Key Z, care of the Journal.

FOR SALE: Office equipment including new examining table, instrument cabinet, treatment cabinet, treatment chair, infra-red lamp, small sterilizer, library, electric refrigerator, Victor Table Type X-Ray, other pieces of equipment. Will sell at sacrifice. Town of 3,500 needs physician. Office space available in air conditioned building, \$22.50 per month. Write Key Y, care of the Journal.

TO LEASE: Am retiring. Want to turn over my practice. Office in home. All furnished as it is including library and office equipment. Write Key H, care of the Journal.

FOR SALE. 1 new McKesson B.M.R. machine, 6 hospital beds (Hill-rom and Simmons), 6 mattresses (slightly used), dressers, bedside tables, floor lamps, one operating table and pad, 1 Castle Autoclave 24" x 36", gas heated, perfect working order, 1 set of hot water tanks 5 gal. with distiller (Castle) gas heated, assortment of surgical instruments, all new, 1 large instrument sterilizer, gas heated. Write Key X, care of the Journal.

FOR SALE. At reasonable price, office equipment of well established physician, recently deceased. Write Key F, care of the Journal.

James G. Hughes, M.D., former O.S.M.A. postgraduate instructor in pediatrics, has been awarded a research grant of \$15,179, with an associate, by the National Heart Institute. The grant will be used to continue studies of high blood pressure in children, under hospital conditions; to study various diseases which produce high blood pressure in children, and studies on the pathologic physiology of acute nephritis. In the studies on acute nephritis, special attention will be given to kidney clearance, electroencephalograms (brain wave patterns) and electrocardiograms.

Jack Gregston, M.D., Marlow, and Mrs. Gregston were guests of honor when the Stephens County Medical Society met at the home of Dr. and Mrs. W. R. Cheatwood, Duncan. Doctor Gregston left September 1 with the 45th. Division.

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COUNTY	PRESIDENT	SECRETARY	MEETING TIME
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Atoka-Bryan-Coal- Johnston.....	B. B. Coker, Durant	W. A. Hyde, Durant	
Beckham.....	H. K. Speed, Sayre	V. R. Payne, Cheyenne	Second Tuesday
Blaine.....	C. L. Rogers, Canton	Virginia Curtin, Watonga	Second Thursday
Caddo.....	C. R. Waterbury, Apache	E. T. Cook, Jr., Anadarko	Third Thursday
Canadian.....	Joseph H. Goldberger, El Reno	Jack W. Myers, El Reno	Subject to Call
Carter, Love, Mar- shall.....	Pat Lawson, Marietta	Ethel M. Walker, Ardmore	Second Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	First Tuesday
Choctaw-McCurtain- Pushmataha.....	Floyd L. Waters, Hugo	H. D. Wolfe, Hugo	
Cleveland.....	Robert O. Ryan, Norman	J. R. Hinshaw, Norman	Fourth Thursday
Comanche.....	Lawrence W. Ferguson, Lawton	Charles Graybill, Lawton	Second Tuesday
Cotton.....	George W. Baker, Walters	Mollie Scism, Walters	Third Friday
Craig-Ottawa.....	L. P. Hetherington, Miami	J. E. Highland, Miami	
Creek.....	J. F. Curry, Sapulpa	Walter Cale, Sapulpa	Second Tuesday
Custer.....	C. B. Cunningham, Clinton	J. B. McGolrick, Clinton	Third Thursday
East Central Okla.	Carson L. Oglesbee, Muskogee	Virgil D. Mathews, Muskogee	First Tuesday
Garfield-Kingfisher.....	Charles J. Roberts, Enid	Roscoe C. Baker, Enid	Fourth Thursday
Garvin.....	Jesse R. Waltrip, Pauls Valley	John R. Callaway Pauls Valley	Wed. before 3rd Thur.
Grady.....	Aaron Little, Minco	B. B. McDougal, Chickasha	Third Thursday
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Greer.....	David Fried, Mangum	J. B. Hollis, Mangum	2nd Mon. Ea. Mo.
Haskell-LeFlore.....	N. K. Williams, McCurtain	G. M. Hogaboom, Heavener	
Hughes.....	L. A. S. Johnston, Holdenville	Geue Slagel, Holdenville	Third Tuesday
Jackson.....	Willard D. Holt, Altus	Malcolm Mollison, Altus	Last Monday
Jefferson.....	Phillip Kouri, Ryan	John B. Jacob, Waurika	Second Monday
Kay-Noble.....	J. W. Francis, Perry	N. H. Cooper, Ponca City	Second Thursday
		C. D. Northcutt, Ponca City, Executive Secretary	
Kiowa-Washita.....	M. Wilson Mahone, Hobart	William Bernell, Hobart	First Wednesday
Lincoln.....	Harold T. Baugh, Meeker	Edward F. Hurlbut, Meeker	Third Tuesday
Logan.....	Phillips R. Fife, Guthrie	John Souter, Guthrie	
McClain.....	Paul Obert, Purcell	W. C. McCurdy, Jr., Purcell	
Northwestern.....	E. A. McGrew, Beaver	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	M. L. Whitney, Okemah	Dayton Rose, Okemah	2nd Mon. Ea. Mo.
Oklahoma.....	John F. Kuhn, Oklahoma City	Ralph Smith, Oklahoma City	Fourth Tuesday
		Mrs. Muriel Waller, Exec. Secty.	
Okmulgee.....	M. L. Peter, Okmulgee	S. B. Leslie, Okmulgee	Second Monday
Osage.....	Vincent Mazzarella, Hominy	Glen McDonald, Pawhuska	Third Thursday
Payne-Pawnee.....	M. L. Saddoris, Cleveland	J. H. Rollins, Pawnee	Third Friday
Pittsburg.....	William P. Lerblance, Jr., Hartshorne	H. C. Wheeler, McAlester	Third Friday
Pontotoc-Murray.....	E. R. Muntz, Ada	C. P. Taylor, Jr., Ada	1st and 3rd Wed.
Pottawatomie.....	C. C. Young, Shawnee	Clinton Gallaher, Shawnee	Third Wednesday
Rogers-Mayes.....	Paul B. Cameron, Pryor	P. S. Anderson, Claremore	Third Wednesday
Seminole.....	J. D. Wood, Seminole	Mack Shanholtz, Wewoka	Third Wednesday
Stephens.....	W. R. Cheatwood, Duncan	Fred W. Taylor, Duncan	Third Wednesday
Texas.....	G. A. Hopkins, Guymon	W. N. Oxley, Texhoma	
Tillman.....		O. G. Bacon, Frederick	
Tulsa.....	Fred E. Woodson, Tulsa	Johu G. Matt, Tulsa	Second and Fourth Monday
		Mr. Jack Spears, Exec. Secty.	
Washington-Nowata.....	R. C. Gentry, Bartlesville	R. J. Bogan, Bartlesville	
Woods.....	D. B. Ensor, Hopeton	W. F. LaFon, Alva	2nd Wed. Odd Months

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

OKLAHOMA ON THE FIRING LINE

Already casualty reports from the Korean war indicate that Oklahoma is right out front. When national emergencies arise Oklahoma responds. This is particularly true of the medical profession. In World War II the record of the Oklahoma medical profession's response was remarkable.

In the present national emergency precipitated by the Korean war, the Executive Office of the Oklahoma State Medical Association with the cooperation of an alert membership has done an outstanding job. Immediately after the alarm was sounded and the call received all wheels were rolling. The medical field was surveyed, the membership assessed and individual data recorded. All this was done with civilian needs in view. It is doubtful if another state medical association in the Union has the medicomilitary situation so well in hand with so much dependable information upon which to base action when occasion arises. Few members of the Association realize what a stupendous task has been performed, the amount of work involved and the many problems yet to be solved.

Contrary to what many members may think, the fact that 14 of our doctors have gone with the National Guard and that the Doctors' Draft Bill has been passed does not fully solve these problems. The Association, through the machinery set up at the Executive Office, must help decide whether or not some of those who come under the draft are essential for civilian care in certain communities or whether or not they can be replaced by older doctors who are willing to fill the breach. This office also is faced with the fact that the military medical needs cannot be fully supplied from the young physicians immediately subject to the draft. Trained men in the various specialties required for military service must be drawn largely from the older groups.

According to government plans already underway, cessation of hostilities now or in the near future, would not materially alter the problems which confront the profession. On the basis of the minimum of three million

in the military service with the accepted ratio of four M.D.'s for every one thousand men the need will continue.

In the minds of some who know much about doctors in war and peace, in uniform and in civilian attire, certain questions arise and worthy speculations ensue. If Uncle Sam must have a large standing army with many doctors constantly on duty is it not wise to give serious consideration to the question as to whether the present practices might not be profitably altered. Perhaps it is not unfair to say that long term military medical service tends toward scientific stagnation, particularly in times of prolonged peace, and that on the contrary civilian practice with the personal obligation of giving full satisfaction, stimulates scientific progress. Anticipating the fact that many may challenge this statement, the writer hastens to say that his investigations during World War II based upon the testimony of servicemen, indicate that from the soldier's viewpoint, the best medical services were rendered by civilian doctors temporarily in uniform in compliance with their country's call.

In view of these considerations would it not be wise to consider a plan for an alternating service with reduced time limits and possibly the employment of many physicians without official army status. Might not such a plan be best for the military, for the people and for the medical profession?

THE GENERAL PRACTITIONER AND THE A.M.A. INTERIM SESSION

It has been said by some critics that the British Medical Association did not stay by the goods when the Health Act was being considered in 1948 and that the plight of the general practitioner in Great Britain is in part due to this fact. It is good to learn that in keeping with established policies the forthcoming interim session to be held in Cleveland is designed primarily for the general practitioner.

The dates are December 1 to 8 and it is to be hoped that Oklahoma may be well represented and that those who attend may be well rewarded.

It is well for the general practitioner to give full cooperation in this effort on the part of the A.M.A., to give him his dues. Such cooperation with the parent organization may help to stave off nationalization of medicine. Since the G.P. is the one who will suffer most this becomes doubly important.

WHAT PRICE PUBLIC HEALTH

What we call public health is not new. Simply and accurately stated it is preventive medicine. It has to do chiefly with the influence of environment. Hippocrates recognized this influence and practiced prevention of disease as well as he could with his limited knowledge of etiology. He recognized health not only as the absence of disease, but something to be cultivated and safeguarded.

Unfortunately, there could be no genuine progress in preventive medicine until we knew more about the etiology of disease and more about physiology and pathology. The great awakening came only after it was discovered that bacteria cause disease. Until that time our knowledge was largely empirical. We were groping in the dark and often hopelessly grasping at the ritualistic and magical for protection.

With the development of our knowledge of etiology, public health became a logical, realistic and positive preventive practice. Properly coordinated with curative practice it becomes a great boon to humanity. In a free democracy public health cannot overstep this recognized line without disturbing the time honored patient-doctor relationship. To clarify this point I quote Dr. W. Hobson¹ of Sheffield University.

"In a free society our aims must be to provide a health environment and to ensure that all possible measures are taken to secure freedom from disease. Each individual must be left free to develop according to his own needs and requirements. The idea that there should be any dragooning into health savours to me of the Nazi doctrine . . ."

Having clearly stated the function of pub-

lic health and indicated its rightful place in a free democracy, the reader's attention is called to the fact that in the past few years the American Public Health Association has stepped over the line and championed the cause of curative medicine. This recently assumed abnormal function of a great public health association makes its own name a misnomer and destroys its right to function in a free democracy.

The next annual meeting of the American Public Health Association convenes in St. Louis. The News Letter of this Association indicates that the Medical Care section will have two independent sessions. This manifest interest in medical care can result only in widespread hostility on the part of all good physicians and lead to inferior medical care.

Every physician in Oklahoma interested in medicine as a free enterprise should try to attend this meeting. This is our country; its government is our responsibility; its citizens are our patients. Public Health is our concern; it is based upon knowledge the medical profession has supplied, and it is up to us to keep it on the level. It should be remembered that the American Public Health Association is not an agency of the government, not identical with the United States Public Health Service.

SHAW SAYS PSHAW — WHAT CAN YOU EXPECT

When George Bernard Shaw had to take it on the hip — his own hip — he spurned socialized medicine, demanded his own private hospital room and specialists of his own choice for which he must pay with his own hard cash somewhat reduced in amount by the taxes he has already paid to provide government medicine which he has always advocated for the good of society but today not good enough for him although he has long outlived his expectancy. As early as the 1880's Shaw was a champion of the Fabian Society plugging for socialism. In his *Experiment in Autobiography* H. G. Wells, also a Fabian, said, "It is interesting to go back now . . . a raw student again, listening to a lean young Shaw with a thin flame-colored beard beneath his white illuminated face. . . . There they talked unconscious of their destinies, and we younger outsiders listened and interjected a very occasional word".

It must be very disappointing to have

1. "What is Social Medicine?" W. Hobson, M.D., B.Sc., D.P.H., Professor of Social and Industrial Medicine, Sheffield University. British Medical Journal, July 16, 1950. Page 125.

worked in a cause 60 years or more and then find it necessary in self defense to throw overboard the alleged benefits it has brought to society.

One question please. Why do not the socialist leaders, some day, decide to be sociable and chummy with the people they lead?

CORPORATE MEDICINE

Having discussed the fact that the U.S.P.H. Association has a committee and a program on medical care, it now becomes necessary to trouble the general practitioner with current agitation about the fact that large hospitals and many corporations are supplying medical care, fixing and collecting fees which should be collected by the physician who supplies the care or the professional service whatever it may be. This practice poses some very difficult problems and the writer is not prepared to supply the answers. He is merely calling these problems to the attention of those who read the Journal with the hope that when the opportune time arrives, they may be ready to make a contribution toward their solution.

PREVENTION NOT CURE IS THE ANSWER

Why should the omnivorous agents of the federal government presume to write a prescription for national medical care. They may be good bureaucrats but their opinions about medical care are worth about as much to the American people as the conclusions of a sophomore bull session would be to a university president. If the government would forget national health insurance (nationalization of medicine) and concentrate on the proper function of the American Public Health Service, namely preventive medicine, there might be some hope for better national health. While this service has hardly scratched the surface in the field of preventive medicine, certain members of this great organization are now advocating a movement which would bring it into the

field of curative medicine which would ultimately defeat its original purposes.

For the past ten years the editorial pages of this Journal have repeatedly proclaimed the importance of preventive medicine as compared to curative medicine. The importance of the Public Health Service in this field has been emphasized and the advisability of keeping medical care (curative medicine) in the hands of private physicians has been stressed. As an argument for this policy it has been pointed out that the mass psychology with reference to the alleged lack of medical care is largely the result of unwarranted bureaucratic propaganda at the taxpayers expense.

In further support of preventive medicine attention has been called to the fact that physicians, nurses and the clergy having virtually free medicine always available and easy hospitalization terms suffer coronary occlusion, cerebral hemorrhage, intestinal obstruction and ruptured appendices just as do other less favored members of society. Apparently they are no better than those following the general mill run. In fact, statistical studies indicate physicians who never have to worry about medical fees even for catastrophic illness (what a good political slogan for the opportunist) fare a little worse than the average.

If popular vision had not been obscured by the adroit pulling of political wool over the public eyes, there might not be eight health bills before Congress at this time. The people should be given the facts and taught to recognize the truth in order that they may remain free. The following comment concerning conditions in Great Britain is apropos.¹

"Lord Chorley said that in this country hardly anyone was prepared to prevent evil from getting going but the country was ready to spend millions of pounds to cure it. They were spending over 400m. pounds a year on curative medicine but were not prepared to find a few thousand pounds to keep going experiments in preventive medicine at the Peckham Health Centre."

1. "Medical Notes in Parliament," *British Medical Journal* (April 8) 1950. page 850.

SCIENTIFIC ARTICLES

THE TREATMENT OF CERTAIN COMMON SKIN DISEASES*

ROBERT R. KIERLAND, M.D.

ROCHESTER, MINNESOTA

Before treatment of the commoner skin diseases is considered, it seems best to review briefly the principles underlying such therapy. Unfortunately, treatment of skin diseases remains primarily morphologic; that is, treatment is directed toward the type of morphologic lesion present. The cause of too many skin diseases remains unknown, and for this reason more specific therapy is not available.

The diagnosis either of a specific cutaneous disease or of the type of morphologic lesion predominantly present is needed for proper therapeutic management. In other words the proper diagnosis is necessary for the proper treatment. The history remains extremely important; environment, diet, contact factors, psychogenic factors, and other factors which may be important, should all be investigated. Systemic disease with its frequent manifestations on the skin should be investigated both by careful questioning and by means of a thorough physical examination. The careful weighing of all these factors may contribute much to the local and systemic management of the disease and the patient.

The choice of topical measures is determined by the morphologic features of the lesions and the most acute lesion determines the type of treatment to be given. For the acute, oozing, vesicular cutaneous lesions wet dressings of Burrow's solution, boric acid, or potassium permanganate are advised, as well as soothing baths of a colloidal type; for the subacute types of dermatoses with only slight crusting, shake lotions and mild soothing ointments may be given. For chronic, scaly, lichenified and thickened dermal lesions more stimulating ointments, such as those containing tar, or salicylic acid, are frequently indicated.

It is better to know only a few prescriptions and to know them well than to have a long list of therapeutic remedies without knowledge of their indications, properties

or characteristics. Many newer ointment bases of the oil in water type, and also detergents, are now available; these are better tolerated by the skin and render therapy more beneficial. In addition, the advent of the antihistaminic preparations means it is possible for the patient to obtain greater relief from his most distressing symptom of itching. In fact, the desire for relief of pruritus brings patients with cutaneous disease to the doctor more often than not.

Two general principles of therapy must be remembered at all times, and these are the following: When in doubt as to the treatment to be given, give the mildest and most soothing type of therapy first. In this regard it is well to treat only a small area first, to observe possible untoward reactions and to observe the benefit gained in this area before proceeding to treat large areas of involvement. By this method it is possible to use two or more preparations in small areas as "trials." Another principle of therapy to remember is the following: Avoid changing the therapy when that previously used or now in use is providing relief. Treatment should be changed only when the dermatologic manifestations have become worse or stationary.

When one or more remedies disagrees with the patient's comfort or the morphologic manifestation of the disease, the following possibilities should be considered: 1. The morphologic factors were not considered when the original type of therapy was selected and that treatment has been too stimulating. 2. Hypersensitivity or idiosyncrasy to the medicament has developed. 3. The ingredients of the medicament were not properly prepared. 4. The method of application was not considered. It is extremely important that wet dressings not be allowed to dry and that ointments and lotions be removed and reapplied frequently enough to prevent cracking and drying of the skin.

With these principles in mind I will proceed to the types of dermatologic therapy

*Presented before the Section on Medicine at the meeting of the Oklahoma State Medical Association, Oklahoma City, Oklahoma, June 6, 1950.

which are more or less specific for certain diseases.

SUPERFICIAL MYCOTIC DISEASE

The most common type of fungus disease for which treatment is needed is trichophytosis pedis. A few basic factors should be considered before the treatment is presented. First of all, the diagnosis should be made properly. It is important to remember in this regard that interdigital maceration of the feet frequently exists without the active infection by fungi and that too often treatment is given for fungus disease without thought of the basic factors of hyperhidrosis with subsequent maceration. In all instances of suspected fungus infection the diagnosis should be proved if at all possible by demonstration of fungus in preparations of potassium hydroxide. Cultures may be taken as well but frequently these cannot be made by the general practitioner.

The type of footwear in use now is a predisposing factor to tinea pedis. Men encase their feet in a "turkish bath" and the sweat cannot evaporate properly. This is the reason that 90 per cent of all mycotic disease of the feet is seen among males rather than among females, who wear open toed and more ventilated types of shoes. Hence, one of the larger considerations of therapy is that the feet should be kept clean and dry. The wearing of perforated shoes or sandals is frequently advised, as is washing the feet twice or more times daily followed by thorough drying. This in turn should be followed by application of one of the standard foot powders. This serves as an excellent prophylactic treatment. Fungus disease of mild type may be cured by this simple method of therapy.

The fungus diseases of the feet may be grouped into two types; first, the acute inflammatory disorder, the treatment of which requires the use of foot soaks or wet dressings of potassium permanganate of 1 in 8,000 dilution or weaker, or Burrow's solution. Active treatment should be withheld until the acute inflammatory reaction has subsided. When the acute inflammatory reaction has subsided or (secondly) when the condition is of a chronic hyperkeratotic nature, treatment is directed toward removal of the hyperkeratotic epidermis. One of the better preparations for this phase of treatment is iodine solution, either in the form of a two per cent tincture, or two per cent iodine in benzol which may be applied twice a day on alternate days; on the intervening

days one of the preparations of fatty acids, containing propionic acid, caprylic acid or undecylenic acid, or the standard half-strength Whitfield's ointment may be used. Such medication should be continued for at least four weeks after all clinical manifestations of the disease have disappeared.

The same type of therapy may be given for the rather common tinea cruris, except that the more stimulating preparations should not be used. A shake solution which contains three to five per cent sulfur usually is well tolerated. For the less inflammatory types of tinea corporis treatment may be the same as that advised for the hyperkeratotic types of trichophytosis pedis.

Tinea versicolor which is a frequently seen condition is difficult to treat. The patient often may need reassurance concerning it. Tinea infection of the scalp in children is a difficult problem, and therapy depends on the type of lesion present. The acute inflammatory process, with the presence or absence of kerion celsi, is usually controlled by the medication previously outlined for fungus disease and does not require roentgen therapy. Ammoniated mercury frequently may be used with success, but it is important to remember that mercury and iodine are incompatible, when used together they produce a severe local reaction, and that they should not be used on the same patient at the same time. The noninflammatory types of tinea capitis should be referred to a specialist since the treatment of this frequently requires roentgen epilation, although there are newer remedies of the fatty acid type which seem to have some merit.

ACNE VULGARIS

Acne vulgaris may be a severe problem to adolescents. Too often physicians tend to dismiss the problem with the statement "don't worry, you'll grow out of it." In the meantime, of course, the acne progresses, and there is subsequent scarring, and frequently a severe psychic reaction which may prove to be more difficult to treat than the pustules themselves. Accordingly, treatment is advised in all instances of acne, even though complete cure is not often possible. Proper treatment tends to alleviate the condition, prevent scarring and render the patient more sightly. Although there are numerous types of acne, in this paper only the common acne vulgaris will be considered. Treatment may be divided into two types; (1) general and (2) local. The general systemic measures provide for dietary instruc-

tion, as follows: The patient is assured that there is no known dietary factor that can be considered paramount at the time of his original visit. He is then instructed to withhold all forms of chocolate, cocoa and excessive pastries from his diet for three or four weeks and then to add back those foods previously restricted and note any untoward effect. In other words, if he improves while on the diet and he becomes much worse when the foods are again taken, these foods are considered to have some etiologic significance. In the same manner, use of other foods such as milk and dairy products, nuts and excessively fatty foods may be restricted. Use of oral preparations containing iodides or bromides should be restricted although this restriction does not include use of iodized salt which should be maintained, particularly in the central states.

Numerous vitamins have been suggested as the treatment of acne. For most patients the administration of vitamin A, 50,000 units or more daily, may be recommended. Its use is indicated especially when follicular hyperkeratotic lesions are associated with the acne.

Because of the frequent association of premenstrual exacerbations of acne in young women, treatment with estrogens has been advised by many dermatologists. The etiologic theory concerned with this is that there is marked sebaceous hyperactivity during and after puberty due to androgens with the resultant appearance of comedones followed by the familiar pustule. Along with this there is seborrhea of the scalp and seborrheic tendencies of the areas of involvement. If other measures fail to provide relief, small doses of estrogen, such as 0.1 mg. of diethylstilbesterol daily or 0.625 mg. of premarin or less daily for three weeks out of four, has given relief to many. The preparations are not taken during the menstrual period. Small doses of desiccated thyroid also are indicated in the more severe types of acne that have been unresponsive to the more conservative types of treatment. However, use of this preparation should be discontinued if tremor, palpitation, irritability, restlessness, sleeplessness or loss of weight is noted. The basal metabolic rate should be determined frequently.

Local treatment comprises, in part, the care of the skin and scalp and proper instructions should be given concerning such care. The patient should be instructed that picking, manipulation, and punching the

skin for expression of comedones is absolutely contraindicated, since this can frequently cause secondary infection and scarring. With the presence of numerous pustules too active cleansing of the face with the use of wash cloths and complexion brushes should be avoided. Nevertheless, frequent washings are indicated, to remove the excess oil and to assist in removal of comedones. The frequency of washing depends entirely on the amount of oil on the patient's skin, and, therefore, the face may have to be washed frequently in order to keep the skin relatively dry. The scalp should be shampooed at least once a week and, when much seborrhea either of the dry or oily type is present, the scalp should be shampooed more frequently. Cosmetics may be used but should be removed thoroughly at night, and the use of face creams should be avoided. Sunlight or ultraviolet light is frequently of marked benefit to patients with acne.

Acne surgery, in that the comedones are expressed by the physician or the pustules are incised and drained, may be done once or more times a week; the frequency depends on the activity of the process. Topical remedies, including a great variety of agents, usually containing sulfur or salicylic acid or resorcinol or combinations of these also are used. No one of these seems markedly superior to the others. These may be applied once or more daily. If, with the use of these measures the acne still continues to be active, it is well to refer the patient to a specialist for further treatment.

IMPETIGO

The proper treatment of the superficial pyococcic infections which remain one of the commonest diseases of the skin, frequently is challenging. Preparations containing ammoniated mercury or an aqueous or alcoholic solution of gentian violet are some of the most satisfactory preparations for local use. However, the staining properties of gentian violet render this preparation frequently undesirable, and ammoniated mercury is sometimes sensitizing. Fortunately, some newer antibiotics, particularly aureomycin and bacitracin, when applied locally give excellent results, and it is suggested that these preparations be used. Their sensitizing qualities are slight and they rapidly produce therapeutic benefit. Preparations containing sulfonamides or penicillin are not advised for use for more than four days because they frequently produce sensitizing

reactions. Daily mechanical removal of the crusts is necessary so that the medicament may be applied directly to the infectious lesion.

ECZEMATOUS CONDITIONS OF THE SKIN

Eczema falls into two basic categories: (1) that of contact dermatitis or contact eczema, which is due to epidermal sensitization, and (2) that of dermal hypersensitivity. Several clinical manifestations of this latter type will be discussed later.

Contact Dermatitis.—Contact dermatitis is due to contact with external agents of innumerable varieties. It may vary from simple erythema to a marked bullous reaction with subsequent denudation of the skin. The management of the acute reaction is that of any acute type of dermatitis, with first the use of soothing wet dressings, and later drying types of lotions. As the dermatitis further subsides, milder soothing ointments may be used. More important than local therapy, however, is the attempt to find the agent responsible for the acute dermatitis, for as long as this remains unknown there is an excellent likelihood of recurrences from time to time. The usual type of dermatitis venenata from ivy is well recognized but for numerous other types of contact dermatitis all of our ingenuity is required in an attempt to detect the offending agent. The history of onset, the time, the place of onset and the site of onset are all extremely important factors in the attempt to detect the offending agent. The carefully taken history eliciting these factors as well as all the agents with which the patient comes in contact in his home, his occupation and during the enjoyment of his hobbies should be considered carefully. The patient should be told that time may be required and that the detection of such agents is not easy. If the offending agent remains unknown after all of this work, the patient may be placed in an environment requiring the least contacts possible and then one new feature may be added to his contact environment each day in an attempt to find the offending agent.

Patch tests are of value in the elucidation of this problem but results frequently are not clear-cut or absolutely diagnostic since the patch tests do not exactly reduplicate the natural contact with the suspected agent. Patch tests should not be employed until the dermatitis has completely subsided for the reason that if a strongly positive patch appears during the course of acute dermatitis, the dermatitis may spread rapidly and even

become universal. Certain of the textbooks of dermatology state the proper dilution and vehicle for the suspected agents when used for patch testing.

If the dermatitis remains prolonged and if the patient suffers repeated episodes, more than one contact agent may be responsible for the dermatitis.

Another type of seasonal contact dermatitis involving the exposed areas of the body and genitals is due to ragweed. This is a difficult problem to control since most of these patients are in occupations of farming or ranching. Desensitization procedures may be attempted but frequently are not successful.

Dermal Hypersensitivity.—The second type of eczematous dermatitis is that known as atopic dermatitis (or neurodermatitis). This is the natural outgrowth of infantile eczema although it may appear at any age. Frequently the patient himself or the family may have a history of asthma, hay fever, vasomotor rhinitis or other allergic phenomena. Exacerbations of this type of dermatitis are frequent during the winter months. Lesions involve the face, neck and flexors of the knees and elbows primarily, although they may become universal. The condition is characterized by a dry, scaly, excoriated, lichenified and pigmented dermatitis in these areas; vesicles are uncommon. It is true that allergic factors may be present but it is uncommon for true allergic investigation and treatment to be of marked or great benefit to the patient. More important in the care of the patient is attention to the psychogenic factors that frequently precipitate the cutaneous reaction.

The patient should be told of the function of the autonomic nervous system and that the skin reaction may be part of the reaction to emotional upheaval and the stress and strain of everyday living. It may be explained to the patient that the human body responds in many different ways to such emotional stimuli and that the type of reaction known as atopic dermatitis is one of these. It is suggested to the patient that he develop a regimen of regular hours of rest, play and work, and that he learn to move slowly, talk slowly, eat, play and think slowly. In other words, he should do everything slowly. He should accustom himself to the idea that haste makes waste, and that even God found it necessary to rest on the seventh day. Frequently a diet in which the commonly offending foods such as choco-

late, nuts, eggs and dairy products, fresh berries, tomatoes and the like are avoided may be followed for a short period and then after a trial for two or three weeks the foods should be added back, one every four or five days, and any untoward reactions on the skin noted. Less often more strict dietary regimens, such as those advised by Rowe and Flood, may be attempted.

Many of these patients require hospitalization, and it is surprising how often the condition may clear up rapidly in the hospital even though the patient is receiving the same type of therapy and same medications as he used previously in his home.

Other therapeutic measures such as auto-hemotherapy, the injection of whole milk, or intravenous injection of triple typhoid vaccine for its nonspecific protein and low febrile effects, may be of value. Local measures again are selected according to the morphologic condition of the dermatitis as presented by the patient.

When the condition has become chronic or when the dermatitis has subsided so that a little erythema persists and only lichenification with or without hyperpigmentation is present, use of a crude coal tar ointment in conjunction with ultraviolet light frequently gives marked benefit. The tar ointment generally is applied to the skin at night and then the next morning the excess tar is removed with a thin oil of vegetable or mineral origin. A thin film of oily tar is left on the skin of the patient. Irradiation then is given with ultraviolet lights of gradually increasing intensity; the degree depending on the tolerance of the patient. Following irradiation the patient receives either a bath with prepared oatmeal (Aveeno) which has been found satisfactory for this purpose, or a starch and soda bath. Following the bath the tar is reapplied as necessary throughout the day.

DERMATITIS OF THE HANDS

The inflammatory dermatoses of the hands is one of the commoner problems of skin disease with which all physicians have to deal. There are many varieties of such dermatitides and they may be grouped etiologically as follows: (1) contact dermatitis; (2) mycotic infections and "id" reactions; (3) systemic reactions to drugs, visceral disease and as a part of other recognized dermatoses; (4) allergic disease, and (5) dyshidrosis or pompholyx.

Contact dermatitis of the hands may be either symmetrical or asymmetrical, depending on the type of exposure to the irritant.

The reaction is usually acute but when there are multiple or repeated exposures it may become chronic. The treatment of this has been discussed previously.

True mycotic infection of the hands is unusual although the diagnosis is frequently made without proof. *Tinea manus* should be proved by means of a potassium hydroxide preparation in which mycelial elements may be found. Another type of reaction, the trichophytid, that is, an acute vesicular eruption of the hands, particularly along the sides of the fingers, may develop as a toxic manifestation of acute inflammatory trichophytosis pedis. The treatment is directed toward the trichophytosis pedis and the "id" reaction subsides when the trichophytosis pedis comes under control. Wet dressings of aluminum subacetate or various lotions may be used locally for increased comfort and to prevent secondary infection of the hands.

In the third group of dermatitides of the hands systemic reactions to drugs, visceral disease and so forth are a large variety of conditions. Involvement of the hands may be part of psoriasis, pityriasis rubra pilaris, erythema multiforme and many other dermatologic entities. In addition, an eruption on the hands may appear as the result of dermatitis medicamentosa or drug eruption. There is a group of recalcitrant pustular eruptions which are not clearly understood but seem to be secondary to foci of infection elsewhere in the body. Another term for this latter group is the "bacterid." When the focus of infection is found, it should be removed for its own sake, and it may be hoped that the eruption of the hands will subside on removal of the focus. Treatment is directed toward the basic condition which accounts for the eruption of the hands.

The truly allergic eruption of the hands is uncommon in our experience, and is to be considered more seriously when other etiologic factors have been considered and disproved. A trial and error method of detection is used to prove that certain foods are responsible or not responsible for the eruption. In this connection, experience from various sources indicates that intradermal or scratch tests are of little value in determining the allergic factor. The patient should use a diet which avoids the more common offenders, and then these foods should be gradually added back to the diet, and any untoward effects on the skin should be noted. A more rapid method of detection is the Rowe type of regimen or the 48 hour

fast followed by the addition of one food daily as advocated by Flood. In this manner the offending food may be found.

The dyshidrotic group of eruptions are vesicular, symmetrical, recurrent reactions of the hands which are precipitated by psychogenic factors. The problem is dealt with as in patients with atopic dermatitis or neurodermatitis. Another type of neurodermatitis involving the hands is a type seen in women past the menopause; this is characterized by thick, scaly, fissured plaques of the palms. It was formerly thought to be due to a hormone deficiency, but now most investigators attribute it to psychogenic factors.

Treatment of the types of dermatitis mentioned is directed toward the etiologic factors if known. Medication used depends again on the most acute morphologic lesion present. It is particularly important to remember that overtreatment is contraindicated. Also important in connection with the problem of dermatitis of the hands is contact with soaps. It is suggested that substitutes for soap of the detergent type be used. It may also be suggested that women use rubber gloves when doing their housework. These should be lined. If lined rubber gloves cannot be procured, the patient should be instructed to use thin cotton gloves under the rubber gloves because rubber next to the skin is frequently irritating. The unraveling of this problem of dermatitis of the hands is extremely difficult and even when all that has been suggested has been done some patients continue to have the condition.

PARASITIC INFECTION

Fortunately, parasitic infections other

than mycotic are becoming increasingly uncommon. Nevertheless, scabies and pediculae occasionally make their appearance and require prompt treatment. A number of new preparations are available for scabies. These are preparations of benzol benzoate, hexachlorocyclohexane and Eurax (R). A powder containing five to 10 per cent D.D.T. is satisfactory for the control of louse infestations.

PSORIASIS

The clinical manifestations of psoriasis are too well known to need further discussion now. The cause is not known and we have no permanent cure. There are many medicaments, however, that will serve to alleviate the condition and render the patient more comfortable. Again, ultraviolet light and sun bathing are one of the best methods of therapy that we have at our disposal. Ointments containing two to five per cent salicylic acid or two to five per cent ammoniated mercury or both, are frequently helpful. However, tar ointments combined with the use of ultraviolet lights as suggested for the patients with chronic atopic dermatitis, remains the best method of treatment for psoriasis.

Experience with undecylenic acid by mouth has been unsatisfactory in the main. Diet does not seem to be of specific value to these patients. They should, however, reduce if overweight and gain if underweight.

SUMMARY

The therapy of some of the more common skin diseases, namely the superficial mycotic and parasitic affections, impetigo, acne vulgaris, the eczematous group of diseases, and psoriasis, has been reviewed briefly.

MEDICAL SOCIETIES AROUND THE STATE

Tri-County

Members of the Tri-County Dental, Pharmaceutical and Medical Society met at Hugo September 12. Doctor Ralph McGill, Tulsa, president of the Oklahoma State Medical Association, presented 50 year pins to R. L. Gee, M.D., Hugo, L. E. Gee, M.D., Broken Bow, J. S. Lawson, M.D., Clayton, and a 50 year pin was also to have been presented to W. A. Moreland, M.D., Idabel, who was unable to attend. Members of the county society will present Doctor Moreland's pin later. A life membership to A. W. Clarkson, M.D., Valliant, will also be presented later by that county society. The Auxiliary met with the County Society. After the presentations had been made, there was a discussion of the activities of the Association and the military situation as it affects doctors. It was a well attended dinner meeting.

Beckham-Custer

Members of the Beckham and Custer County Medical Societies met recently for a joint meeting in Elk City to hear an address by Robert Anspaugh, M.D., associate professor of obstetrics and gynecology at the University of Oklahoma School of Medicine.

Seminole County

A film on allergy was shown at the recent meeting of the Seminole County Medical Society held in Wewoka. Eight physicians from Seminole and Wewoka attended the meeting.

THE ACUTE ABDOMEN - OUTSIDE LOOKING IN*

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These three words — outside looking in — have often appeared to be stamped on the x-ray films of the acute abdomen presented to me for interpretation. The films alone usually confirm or disprove the clinical diagnosis, or they indicate some lesion or pathology that was not suspected clinically. This swived-chair type of diagnosis is often accurate and the roentgenologist often measures up to the public belief that x-rays always reveal the pathology concealed by the abdominal wall.

"Outside looking in" is also the reaction I sometimes experience when the surgeon excludes the roentgenologist, or assigns him an off-stage role, in the drama of the acute abdomen that may or may not reach its climax in the operating room. The roentgenologist sometimes misses his cue in such circumstances. But when the surgeon requests the roentgenologist to hear the prologue, read the laboratory reports, see the leading character and feel and listen to his abdomen, then the roentgenologist assumes his proper role as a consultant when he interprets the intestinal gas shadows and fluid levels in the x-ray films of the acute abdomen. He can correlate his x-ray findings with clinical findings and better determine the pathological-physiology present. The roentgenologist, in this setting, can assume also his proper auxiliary role in management of patients with acute abdomen, particularly in intestinal obstruction, when he is called to manage the intestinal intubation.

Four major conditions are to be considered in this presentation of the acute abdomen:

- 1—Intestinal Obstruction.
- 2—Peritonitis.
- 3—Perforation of Hollow Viscus.
- 4—Trauma.

I. INTESTINAL OBSTRUCTION

The most important condition from the

clinical and x-ray diagnostic standpoint is the acute intestinal obstruction group. From anatomical standpoint, these lesions are classified as:

- a—Obstruction of small intestine, partial or complete.
- b—Obstruction of large bowel, partial or complete.

From a pathological-physiological and therapeutic standpoint, the obstructions are considered under:

- 1—Paralytic or adynamic ileus.
- 2—Acute simple mechanical obstruction — high or low in position.
- 3—Strangulation Obstruction.

The physiological changes in acute paralytic ileus and acute simple mechanical obstruction are, at the onset, similar in that there is a marked dilation of the intestines in both conditions, with resulting physiological alteration in the intestinal walls — inability to absorb fluids, loss of body fluids into the intestinal walls, and progressive increase in intra enteric pressure. These changes are more pronounced and progressive in intestinal obstruction. When interference of blood supply is superimposed on this progressive intestinal distention, then strangulation obstruction occurs, with resulting gangrene of bowel and peritonitis. The diagnosis of the above three pathological-physiological conditions requires a close correlation between the clinical findings and the x-ray demonstration of dilated loops of intestine and fluid levels.

Visible gas in gastro-intestinal tract is not abnormal in adults. It is often seen in acute pneumonias, asthmatic attacks, toxemias, after cystoscopy, in infections of intestinal tract, etc. In these conditions, the bowel is not distended beyond its normal diameter and the gas or stasis is of a transient nature.

In adynamic ileus, a reflex condition often occurring in postoperative cases, the stomach, small and the large bowel are abnormally di-

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lated. This generalized bowel distention is the chief x-ray finding that differentiates paralytic ileus from acute simple mechanical obstruction. In paralytic ileus, the loops of bowel are less distended and valvulae conniventes less prominent than in mechanical obstruction. Also, the fluid levels in the small intestines are usually absent or only small in amount in adynamic ileus. When a definite diagnosis of adynamic ileus is made by x-ray studies, then the surgeon can employ pitresin, prostigmine, turpentine stools, enemas or intestinal suction to relieve the intestinal distention.

When adynamic ileus is associated with or results from peritonitis, localized abdominal abscess, or an inflammatory mass, then the x-ray diagnosis of adynamic ileus becomes much more difficult. We must early recognize the onset of acute simple mechanical obstruction due to adhesions that very often occur in inflammatory intra-peritoneal conditions. If a definite diagnosis in such cases is not established by x-ray and clinical findings, and surgery therefore delayed, it is advisable that repeated x-ray studies be made at four to eight hour intervals during this period of observation. Don't trust your sense of palpation of the abdomen, for we very often see tremendous increase in small bowel distention with presence of multiple fluid levels, without any notable increase in the abdominal distention that can be noted clinically. During this period of observation, intestinal intubation should be started and the progress of the tube and degree of decompression of small intestine determined by repeated x-ray or fluoroscopic studies. Portable x-rays can be used for such studies at the bedside. In many cases of simple mechanical obstruction associated with peritonitis, this suction therapy often relieves the inflammatory condition in the distended bowel, and the obstruction is often relieved without surgery. This is true also in some cases of obstruction due to adhesions occurring several days after recent abdominal operation. Before the intestinal tube is removed in such cases, it is advisable to inject one to three ounces of barium meal into the tube and observe its progress. If the barium passes promptly beyond the tip of the tube and appears in large bowel in five hours, then the obstruction is relieved and the tube can be withdrawn. This type of x-ray is far more accurate and informative in regard to proper time for removal of intestinal tube than the usual clinical method;

i.e., discontinue suction and see if abdominal distention returns.

If repeated x-ray films show gas and fluid levels accumulating in a few isolated loops of bowel while the patient is being decompressed, and if the patient continues to have colicky pain and toxic symptoms, then strangulation obstruction should be suspected and prompt surgery instituted. The routine x-ray film of abdomen is also valuable in establishing the diagnosis of strangulation obstruction as occurs in incarcerated hernias and volvulus. In such cases, gas from proximal loops becomes trapped in the strangulated loop, so that the x-ray reveals a localized distention of two segments of bowel with dense band between the loops that represents fluid within the walls of the strangulated intestinal loop. These loops contain a large amount of fluid and they remain fixed in position when the patient is x-rayed in supine and upright or lateral decubitus position.

The x-ray diagnosis of acute obstruction of the large bowel by means of a scout film is not difficult if the condition is suspected clinically. The large bowel is seen to be markedly dilated up to the site of obstruction. When the obstructing lesion is in the ascending colon, or when the ileo-cecal valve is incompetent, considerable dilation of the small bowel occurs. The differential diagnosis from paralytic ileus becomes difficult in such cases. It is always advisable, when possible, to locate the exact site and the nature of the colon obstruction by means of barium enema, administered slowly, stopping the clysis when site of obstruction is reached. Obstructing polypoid carcinoma, intussusception, inflammatory strictures secondary to diverticulitis or extrinsic bowel lesions, volvulus of sigmoid, etc. can usually be determined by means of simple barium enema.

II. PERITONITIS

The differential diagnosis between peritonitis and postoperative ileus with toxic symptoms, and differential between peritonitis and early mechanical obstruction of small intestine is often very difficult to determine by x-ray studies. I lean heavily on the clinical findings in these cases before I write my impressions of the intra-peritoneal pathology. It is in these groups of cases that I often suggest that intestinal intubation be employed if prompt surgery is not advisable.

Several findings often associated with

peritonitis are as follows:

1—Generalized haziness throughout the abdomen, blurring the appearance of viscera. In appendical abscess or pelvic abscess, these faint or dense opacity would be localized within the pelvis.

2—Obliteration of peritoneal markings: i.e., the fat layer over peritoneum, best seen along the lateral abdominal wall, is obscured.

3—Dilation of a few loops of the small intestine is the usual finding in peritonitis. The peritoneal fluid often separates the adjacent walls of the dilated loops of bowel.

4—Fluid levels in isolated loops of dilated small intestine is seen in peritonitis without mechanical obstruction. When dilated loops of intestine occur chiefly within the pelvis and remain partially fixed, adhesions associated with peritonitis is the likely diagnosis.

5—Elevation of diaphragm and splinting of diaphragm, as noted by fluoroscopy, occurs in peritonitis. This finding is seen in most intraperitoneal inflammatory conditions.

III. PERFORATION OF HOLLOW VISCUS

The clinical picture of a perforation of a hollow viscus is usually typical and diagnostic. Some patients who experience the sudden agonizing abdominal pain at the time of perforation, are fairly comfortable by the time they reach the hospital. The demonstration of free air under the diaphragms in these cases convinces the patient and the doctor of the need of prompt surgery. The x-ray findings in perforations due to peptic ulcers are positive in 80 per cent of cases. Negative findings are usually due to the fact that fluid only passes through the ball-valve perforation, while air in the stomach is trapped above the fluid. As little as 10 cc. of free air in intraperitoneal cavity can be detected by x-ray studies. Good x-ray technique is essential. The lateral decubitus position (patient lying on left side, rays directed in A. P. position) should be taken in addition to upright films.

Occasionally a patient will enter the hospital 24 to 48 hours after the onset of a perforated peptic ulcer, without experiencing any severe abdominal pain or abdominal rigidity. The free air under the diaphragm is found accidentally during fluoroscopy of chest or of the stomach. It is not advisable to operate such patients at this time, for perforations are usually sealed off. Doctors Eusterman and Balfour state in their book that a chronic or protected perforation is a

common complication of chronic peptic ulcer and is noted in one of every four cases in which a gastric or duodenal ulcer is verified surgically.

IV. TRAUMA

The x-ray is often the most valuable diagnostic aid in the acute abdomen resulting from trauma — due to some external force or injury or following perforation of the abdominal wall by a weapon or missile. This type of acute abdomen was my chief concern during World War II when I served as roentgenologist in the evacuation hospital on the continent and later in a general army hospital. The missiles that perforated the body often produced severe injury to an organ that was far from the site of entrance. Films of the abdomen were always taken in an A. P. and lateral projection when a missile entered the body anywhere from upper chest to upper thigh. My technicians were instructed always to place some marker over site of entrance of missile. I could then report to the surgeon the probable course and the organs probably damaged or perforated along the course of the missile.

Hemo-peritoneum or hemo-pneumo-peritoneum was often diagnosed in the field hospitals. Perforation of stomach or colon always produced free air within the peritoneum. Perforations of small intestine did not reveal any free air. Pneumo-peritoneum occurred often when missiles penetrated the lung and entered the abdomen through the diaphragm. Rupture of the bladder was readily diagnosed by injection of air into the bladder and then noting free air under the diaphragm in an upright position or between the liver and abdominal wall in a left lateral decubitus position. Perforation of liver or spleen was made from x-ray standpoint usually by the course of the missile. Sometimes sufficient blood accumulated around these organs to displace the adjacent gas-filled colon in caudad direction. Rupture or perforation of kidney was sometimes made by loss of the kidney contour and obliteration of psoas muscle shadows. Usually this diagnosis was made by intravenous injection of diodrast or neo-iopax and noting the extravasation of the dye into the peri-renal or retro-peritoneal tissues. Barium was never used to diagnose perforations of the stomach, small or large bowel.

Many soldiers who were operated for traumatic conditions of the abdomen in the evacuation and field hospitals, developed in-

testinal obstruction from resulting adhesions when they arrived at the rear echelon. Doctor Mulholland, Chief Surgeon at First General Hospital in Paris, insisted that intestinal intubation be started promptly in such cases; that the patient be in electrolytic and fluid balance before any surgery for relief of intestinal obstruction be undertaken. Very often this suction procedure alone caused the obstruction to disappear.

SUMMARY

The roentgenologist can render a real consultation service in acute abdominal conditions when he can correlate the clinical and pathological-physiology of each case with his roentgen findings. The chief diagnostic roentgen findings in intestinal obstruction, peritonitis, perforation, and traumatic abdominal injuries have been presented.

NEWER METHODS OF CHOLECYSTOGRAPHY*

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Since the discovery of cholecystography some 25 years ago,⁶ rapid strides have been made in the diagnosis of gall bladder disease. Other than Priodax which came into use about 1941, most of the advancements have been made in the department of technique. Today probably no phase of diagnostic roentgenology is more rewarding or gratifying than that of cholecystography. Employing the techniques to be described below, the radiographic diagnosis should be well over 95 per cent accurate. This study consists of 506 consecutive cholecystograms, 190 of which were found to be pathological, and the correlation of the x-ray findings with the pathologic findings of 48 cases which came to surgery.

TECHNICAL FACTORS

The first requisite for a satisfactory examination of the gall bladder is a skillful x-ray technic. The accuracy of the radiologist's report is in direct proportion to the care and diligence exercised by the technician in giving the patient proper instructions and securing properly exposed films with the patient in various positions. We routinely use three grams of Priodax. This is a white crystalline powder, insoluble in water and having an iodine content of 52 per cent. It is of course excreted in the bile

but not in sufficient concentration to visualize the gall bladder until after the gall bladder has further concentrated it. This is demonstrated by the fact that the common duct never visualizes following administration of the dye after cholecystectomy. It has been shown that about 50 per cent is excreted through the kidneys in the first 24 hours. We have occasionally visualized the right renal pelvis following its administration. Many workers have proved that it is equal if not superior to the intravenous method using tetraiodophenolphthalein being much safer and giving less side reactions.^{8 11 13}

A preliminary scout film is always taken at the time instructions are given to the patient. This is essential to pick up stones which may be of the same density as the dye-filled gall bladder and also a calcified gall bladder or gall bladder full of milk-of-calcium bile may simulate a normal functioning gall bladder. The patient is instructed to abstain from fat-containing food from the night before until after the examination is completed. He is given three grams of Priodax and told to take it at 6 o'clock the preceding night and report for examination at 8 o'clock on the following morning. It is not necessary to limit their fluid intake. Fourteen or more hours after the dye is taken another film in the prone position is made of the right upper quadrant. This

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film should include the upper portion of the ilium, the lower half of the liver, the peritoneal fat line, and as far to the left of the vertebral column as possible. One of the prime considerations is making the exposure time as short as possible. We prefer two-tenths of a second or faster. Films must be taken with respiration suspended and a high speed Bucky grid. We employ 36 inch distance and the liberal use of a compression band for immobilization of the patient. The kilovoltage may vary as the thickness of the patient. These factors presume the availability of adequate equipment. This film is used principally to localize the gall bladder so that additional films may be taken using an extension cone. If a diagnosis can be arrived at from the prone film, no additional views are taken. However, if the gall bladder appears normal or is obscured by overlying gas or fecal material, spine, or situated in the pelvis, additional views are taken. These may include films taken in inspiration or expiration, films taken with pressure applied by a block of balsam wood, upright views, or use of the transabdominal position as described by Kirklin.^{9 10} These additional views not only invariably clear away confusing gas shadows and displace the gall bladder away from the spine, but also are very useful in layering non-opaque stones or gravel which is not visible on the prone film. This layering may be distributed in the most dependent portion of the gall bladder or it may form a floating translucent zone in the gall bladder. This is explained by the fact that the bile which is more concentrated has a greater specific gravity than less concentrated bile and the stones have a specific gravity which is somewhere in between the various densities of the bile.

Providing the gall bladder visualizes, the above-mentioned steps invariably allow one to arrive at a diagnosis. In the event the gall bladder fails to visualize, one has to first rule out other diseases such as pyloric obstruction or intrinsic liver disease. The patient should also be closely questioned as to whether or not he took the dye, at what time, whether or not he vomited or had severe diarrhea. One should also be on the lookout for a situs inversus. In the event none of the above factors are in play, we keep the patient on a low fat diet for another 24 hours and administer a double dose making a total of nine grams of dye in 24 hours. Of our operated cases, half of the non-functioning gall bladders had a double dose and none visualized on the second examination.

Of those that have not been operated about one out of five visualized with the double dose. We feel that most of these cases represent instances of the patient not following instructions or some other violation of technique. We use a preliminary double dose only in those patients who are unusually obese.

With the use of these additional views we have not found it necessary to use pitresin or enemas to clear away confusing gas shadows. We thus avoid the dangers inherent in using pitressin in certain patients and also the inconvenience of giving an enema which is not too satisfactory anyway.

From a random survey of the literature on cholecystography,^{5 12 14} most people routinely employ the fatty meal. We do not use the fatty meal routinely because as previously mentioned, the gall bladder has to concentrate the dye in order for it to visualize on the film, and this is a test of function in itself. Also, if the gall bladder contracts slowly or not at all, we feel one has gained very little additional information because these findings are difficult to interpret. It has been shown that 10 per cent or more of people have poor or sluggish contraction of the gall bladder following fatty meal.^{3 7} Also there has been some evidence that the gall bladder contracts more slowly and to a lesser degree with Priodax than with tetraiodophenolphthalein.² Using the upright and transabdominal views we feel we miss very few if any stones that could be visualized after the gall bladder was reduced 50 per cent in size following a fatty meal. Occasionally when the gall bladder is unusually large and not too well visualized, a fatty meal may be of help supplemented with upright and transabdominal films.

We have recently been conducting barium enemas or upper G. I. series or both examinations on patients the same day as the gall bladder series. We do this rapid visceral survey similar to Gianturco giving the patient his dye at 4:00 P. M.; two ounces of castor oil at 8:00 P. M. and have them report for examination at 8:00 A. M. the following morning.⁴ If we are also doing a G. I. series, we of course discontinue anything by mouth after bedtime. We have found no instance in which the gall bladder failed to visualize following this regime and later visualized when castor oil was not used. By elimination of our fatty meal for gall bladder series, we thus have a dry stomach for the G. I. series.



Fig. 1. Position for upright film of gall bladder.

INTERPRETATION

If the films are of good quality, there is usually little difficulty in interpretation. There are only a limited number of diagnostic possibilities. The gall bladder either visualizes or does not, and if it does, there are either stones present or there are none. Changes in position of the patient readily rule in or out polyps. In this series no case of polyp or malignancy of the gall bladder was encountered. There were 4 instances of calcified gall bladder all of which showed an irregular, nebulous type of calcification which would not be confused with a normal functioning gall bladder and which did not layer in the upright or transabdominal views as opaque stones would.

There are a few shadows that may occasionally be confusing such as renal calculi,

calcification of costochondral junctions, calcified mesenteric nodes and epiploic appendages, coproliths, and calcifications in the lung base. The relationship of these calcifications to the gall bladder is usually quite evident in varying the position of the patient.

DISCUSSION

In this series of 506 consecutive cases of cholecystography, 190 were found to be pathological. Of these, opaque gall stones were demonstrated in 28, non-opaque stones in 25, poor visualization was reported in 31, and non-visualization in 106. Of these 190 pathological cases, 48 had surgery. In all the cases stones were reported on x-ray, stones were found at surgery. Of those reported as showing poor visualization, two were operated and both showed cholelithia-

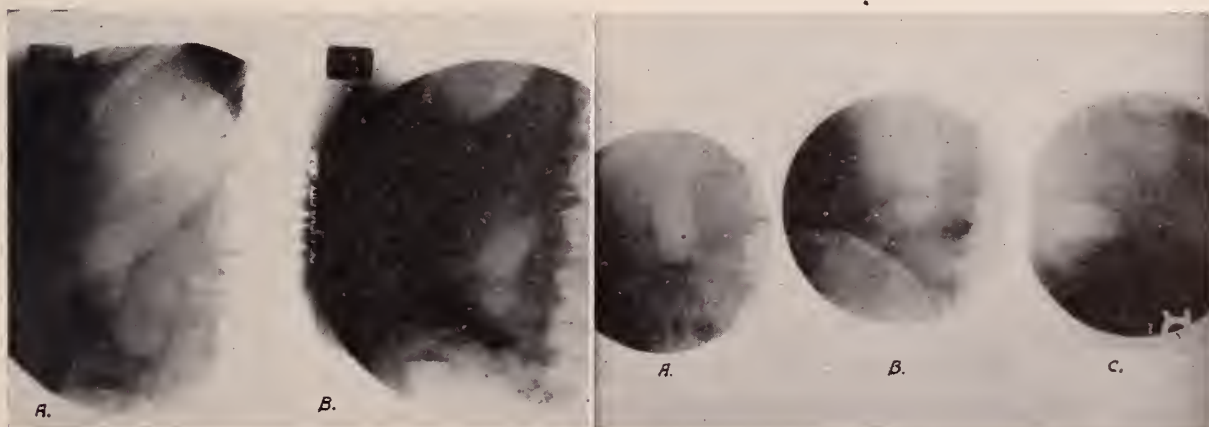


Fig. 2. Position for right lateraldecubitus film of gall bladder.

506 Consecutive Cholecystograms

Females - 300 Males - 206	
506 cases:	316 normal visualization 190 pathological
190 pathological cases:	28 opaque gall stones 25 non-opaque gall stones 31 poor visualization 106 non-functioning (4 calcified gall bladder)
48 cases had surgery:	
<u>X-ray Diagnosis</u>	<u>Pathologic Diagnosis</u>
10 - opaque stones	10 - Chronic Cholecystitis and Cholelithiasis
10 - non-opaque stones	10 - Chronic Cholecystitis and Cholelithiasis
2 - poor visualization	2 - Chronic Cholecystitis and Cholelithiasis
24 - non-functioning g. b.	22 - Chronic Cholecystitis and Cholelithiasis 1 - Chronic Cholecystitis
1 - calcified g. b.	1 - Cirrhosis of the liver
1 - normal functioning g. b.	1 - Calcified gall bladder and Cholelithiasis
	1 - Normal gall bladder

Table 1

sis and chronic cholecystitis. Of those showing non-functioning gall bladders, 24 were operated, 22 showed chronic cholecystitis and cholelithiasis, one chronic cholecystitis, and one man had an advanced cirrhosis of the liver. One of the gall bladders removed at operation was reported a normal functioning gall bladder which corresponded with the pathologic report.

From this series of cases, it can be seen that roentgenologic examination of the gall bladder is a highly accurate test and an indispensable adjunct to clinical medicine.

In those cases where poor or non-visualization of the gall bladder is reported, the greatest error is apt to occur.³ It has been stated that 13 per cent of poor functioning gall bladders and four per cent of non-functioning gall bladders are normal.¹ In those type of cases operated in this study, 96 per cent had cholelithiasis and chronic cholecystitis. Others indicate that from 50 per cent to 75 per cent of these cases will have stones.^{1 15} Tracey says that of those patients operated who have stones, 90 per cent have a good post-operative result while 31 per cent of those without stones are unimproved.¹⁵ It would seem that a close correlation of history and clinical findings with the x-ray findings would be of great moment in deciding how those people with poor or non-functioning gall bladder should be handled. If symptoms are vague a thorough search must be made of collateral organ systems for possible disease. Some state that many of these poorly visualized gall bladders are well visualized after a short period of conservative management. This point has not been verified in this study by adequate follow-up.

SUMMARY

1. Oral cholecystography with Priodax is a highly accurate and satisfactory method of examining the gall bladder.
2. Meticulous, clearly-phrased instructions to the patient will obviate many repeated examinations.
3. Upright and transabdominal views of the dye-filled gall bladder are helpful aids in removing over-lying or skeletal parts and demonstrating non-opaque stones.
4. We feel the fatty meal is not an essential step in cholecystography.
5. Rapid exposure and immobilization are essential.
6. Close correlation of x-ray and clinical findings are necessary in poor or non-functioning gall bladder.

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WHAT THE FAMILY MEDICAL ADVISER SHOULD KNOW ABOUT FENESTRATION SURGERY*

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Much has been written in the past few years regarding fenestration surgery. The object of this presentation is to briefly outline the history and development, diagnosis and operative principles, and what the patient and referring doctor should have in the way of general knowledge.

It has been the author's experience that the family medical adviser is of great value not only in recognizing suitable cases but in the giving of advice to the operator and the patient. He may be a general surgeon, obstetrician, or a general practitioner. Not infrequently there may be a family relationship. On several occasions one or more of these medical men have stated that they should know more about the subject.

Holmgren (1916)¹ was the first to develop surgical procedures of value for the correction of hearing loss from otosclerosis. His results of hearing improvement were temporary due to the bony closure of the new window which had been made into the labyrinth. Sourdille (1924),² after a visit to Holmgren, developed an operative procedure which resulted in the first case of permanent hearing improvement.

Julius Lempert³ next developed a one stage operative procedure which he named fenestration. A fistula was made into the prominence of the horizontal semi-circular canal and was covered with a skin flap attached to the tympanic membrane. Technical improvements, such as the endaural incision, excellent anatomical knowledge, and the use of the dental finishing burr, were forthcoming. Lempert welcomed visiting otologists and established a teaching course for training of future operators. Gradually all opposition to this type of surgery has practically disappeared. Both as a student of Doctor Lempert and as a practicing otologist, it has been my opportunity to have observed and treated post-operatively numerous cases performed by Doctor Lempert and others where the results have been quite successful for a period of eight or nine years. For the

past three years I have had the opportunity of observing my own operative cases.

Shambaugh,⁴ House,⁵ Meltzer,⁶ Day,⁷ and others have all contributed technical improvements and much to the literature and advancement of this highly specialized field. Further improvements undoubtedly will be forthcoming.

Various operators have obtained hearing improvement to the practical service level of 30 decibels in 50 to 80 percent of their cases. The ability to restore hearing well enough for social and economic purposes is the real criterion. The ability of the patient to hear a whisper at 15 to 20 feet is a great satisfaction to both the patient and the operator.

The etiology of otosclerosis is not known. However, the pathology is manifested by the changes as follows:⁸

Localized resorption (absorption) of the original bone of the capsule by lacunar erosion.

Replacement of the absorbed bone by immature web-like bone containing much cementum and few fibrils.

Repeated lacunar resorption and replacement.

Replacement sooner or later, in turn and to varying extents by lamellar bone.

The continuation of the process results in the formation of brecciated bone.

The otosclerotic process may become stationary at any period of its development and may start up anew in previously, apparently quiescent areas.

In 10 to 15 percent of the cases, the slowly enlarging focus of otosclerotic bone reaches the oval window and proceeds to grow across the annular ligament into the foot plate of the stapes. This fixation of the stapes mobility is known as otosclerosis and actually can be demonstrated at the time of the operation.

Lempert⁹ has estimated that there are six million persons affected by otosclerosis in the United States. Of course, many of these cases are not eligible for surgical help.

The average age of onset is about 20 to 30 years of age.

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Women are more often affected than men.

Pregnancy and lactation accelerate the loss of hearing in about 25 percent of those involved.

Progression of hearing loss, while variable in its rate, continues despite therapeutic efforts.

About two-thirds of the patients with otosclerosis give a family history of progressive deafness.

Cochlear nerve degeneration is a frequent complication and is one reason for not postponing the fenestration for too long a period.

POINTS IN DIAGNOSIS

Conduction type of deafness is determined. The audiometric studies disclose poor air conduction and good bone conduction.

Schwabach, Rinne, and Weber tuning fork tests verify the above findings.

The Weber test is usually referred to the more obstructed side of the head.

Other causes of conduction deafness such as external auditory canal obstruction, perforated tympanic membrane, and middle ear disease must be excluded.

Points of value in taking the history are familial progressive deafness, paracusis willisiana (ability to hear well in the presence of noise), unexplained tinnitus aurium in many cases, vertiginous attacks in some patients, and the ability to hear well by the use of the bone conduction hearing aid.

Eligibility for surgery is determined by (1) audiometric bone conduction levels of 30 decibels or better for the speech frequencies of 512, 1024, and 2048 vibrations. (2) Rinne tuning fork test is negative with the 512 and 1024 forks. (3) Schwabach test (bone conduction) is normal or prolonged with the 512 and 1024 forks. (4) Air conduction loss may be as much as 70 or 80 decibels.

Fenestration surgery involves the bypassing of the stapedial ankylosis in the oval window with a new window into the labyrinth at the ampulla of the horizontal canal.

Lempert¹⁰ described his one stage endaural technic in 1933. Three years later he reported the nov-ovalis technic. Most operators are using this procedure, some with modifications. The incidence of closure is from five to 10 percent. Lead rimming of the fenestra has been used by some operators for the past three years. The Lempert cupola technic,¹¹ involving a bone dust free po'tential, has been in use for the last year.

Fenestration surgery involves specialized

training and equipment. It is a meticulous and highly technical operative procedure which requires from one and one-half to three hours in the operating room. There is little or no risk to the patient from a life and death standpoint. Complications can occur in the form of facial paralysis, labyrinthitis, and a disturbed emotional state.

A flap of about two-thirds of the external auditory canal and the tympanic membrane is made after the endaural incision. By means of the endaural incision, the operation is performed through the ear canal. Within two to three weeks, this incision is healed and there is little or no noticeable deformity or scar. The patient does notice dizziness to a variable degree for the first two or three days following the operation. Sudden motion or turning the head will sometimes result in a tendency to vomit. These individuals are all cautioned before operation and after operation that they must not move their head quickly. For at least one hour following the ingestion of liquids or food, they must remain in a comparatively stable position, at least as far as their head is concerned. The vertigo gradually decreases the first few days following surgery, and most of the patients that we have seen are able to be up and around with some help about the fourth or fifth day post-operatively. They should be warned to have some assistance when first getting out of bed. The vertigo continues to decrease and by the end of the seventh to tenth day most of the patients are able to leave the hospital and return to their homes or their hotels. There is very little pain associated with the operative procedure or the post-operative care. Not infrequently, the ear may drain for weeks or in some rare cases for months. This is due to the fact that a modified radical mastoidectomy is performed in so-doing the fenestration surgery, and there are some exposed cells and areas that must be covered over by new epithelium. Granulations have a tendency to occur, and for this reason the patient must be seen at frequent intervals following the operation. However, the length of time and the amount of drainage does not have any direct bearing on the ability of the patient to hear if the operative procedure is correctly performed and the patient has hearing improvement following surgery. In our series of cases, we have been able to choose the poorer hearing ear for surgery. In this way we have been able to assure the individual that his hearing will not be any worse than before surgery. They will still

have the hearing with their so-called good ear. There is usually a further progressed otosclerosis in the ear where the hearing loss is the greatest.

Many of the patients will notice an improvement at the end of their first six or seven days in the hospital, and it has been quite interesting to be able to have these individuals give you their new experiences in their ability to hear. Several have stated that they have heard the birds sing for the first time in years while others will be able to note noises about their homes and their places of business that are absolutely foreign to them.

If there has not been a definite evidence of improvement in hearing within the first three or four weeks, it is not likely that there will be further improvement in the future. Preparing the patient before the operation for the likelihood of a failure in improvement is most essential. These individuals should be told that they may be in a lucky fortunate group of individuals. However, again it is important to tell them that they will not be made any worse if the poorer hearing ear is chosen for surgery. In the past three years, we have performed 23 fenestrations for relief of clinical otosclerosis. Of this group, 18 have had what the patient and we both consider to be a successful result. Many of these individuals are now able to hear a whisper at 20 feet, and in one or two of the cases, a percentage loss of between five and nine percent is now present. Three of the cases have had an improvement, but not to the point of complete serviceability. Two of the patients have failed to show any evidence of improvement following surgery. Of the individuals who showed some evidence of improvement, two of these patients have been able to be without their hearing aids part of the time. However, they were borderline cases when first chosen for surgery, and they complained bitterly of their tinnitus aurium which has been relieved since surgery. We have also had one other case that has had surgery for a very severe form of Meniere's disease of two years duration during which every form of therapy was tried by various doctors. For the past eight months following surgery, he has had a complete recovery of his sense of balance with only a slight improvement in his hearing. The fenestration procedure was not for hearing, but for the correction of his vertigo.

Most operators believe and can prove that

there is little or no progression of hearing loss, other than that associated with changes in age, where there has been a successful fenestration.

Progression of hearing loss in the unoperated ear often is observed and may be an indication for surgery on the second ear.

Ages of 23 operated patients under observation from six months to three years:

RESULTS

Good to excellent	Improved but not to level of service	No change
20, 29		26
30, 33, 33, 34, 35, 36,		
37, 39		
40, 40, 42, 43, 47, 47,	46	
51, 52	57, 58	58
18 cases	3 cases	2 cases

Fenestra response has been good in all patients except one. A revision was performed on this patient with good recovery of hearing which has lasted for 18 months. In her case, closure of the fenestra occurred in the third month post-operatively. There had been good hearing for two months previously. Revision was performed eight months after the original fenestration.

Most operators, using the present day technic, believe that hearing improvement from a patent fenestra maintained six months to one year post-operatively will continue indefinitely.

CONCLUSIONS

1. That in the past decade there have been marked advances in the diagnosis and handling of cases of clinical otosclerosis.

2. To date surgical procedures have been proven to be of value, not only in restoring hearing in a certain percentage of cases, but in the prevention of progression of hearing loss.

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PERSONAL EXPERIENCES WITH ACTH AND CORTISONE THERAPY

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In my hands the parenteral use of ACTH and cortisone has produced very prompt healing of desperate cases of chorio-retinitis and uveitis regardless of the etiology. Some tuberculous cases are relapsing even several weeks after completion of treatment, and I feel certain that dihydro streptomycin and promizole or para-amino salicylic acid should be continued for some time after administration of ACTH or cortisone.

Using ACTH, a case of acute retrolental fibroplasia has been healed, with only slight permanent ocular defect. Three other cases, all acute, are under treatment at the present time.

My recent experiences with the local use of cortisone in various anterior segment involvements leads me to reserve the parenteral use of ACTH and cortisone for truly desperate posterior segment disease.

During the past several months my associate, Robert I. Trent, M.D., and I have used cortisone solution locally in 55 eyes. The results have been very dramatic. We have employed the full strength preparation of Merck (25 mgms. per cc.), using one drop every three hours during the day and once during the sleeping hours. No other drugs were used during the period of cortisone therapy except atropine, when indicated. The conditions treated were as follows: Acute purulent conjunctivitis, recurrent epithelial erosions of the cornea, vernal catarrh, kerato-conjunctivitis (both allergic and non-specific), corneal ulcers (non-specific, post-hepetic, dendritic), interstitial keratitis (tuberculous, congenital luetic, non-specific, disciform, bullous), iritis (acute and chronic, both mild and severe; tuberculous, focal infection, post-operative, traumatic).

The only conditions that failed to heal were the two eyes (one eye in each of two patients) exhibiting bullous keratitis. Both were of long standing and had followed complicated intraocular surgical procedures.

Reduction of pain and photophobia was noted in all cases beginning six to 36 hours after onset of treatment. Several cases of mild iritis cleared entirely in 48 hours. Corneal infiltrates could be seen to begin fading out in 48 hours. One severe chronic interstitial keratitis of 18 months duration was healed in 10 days. One case of purulent conjunctivitis with extreme chemosis failed to respond to aureomycin and subsided completely after 48 hours of cortisone locally.

The local use of cortisone inhibits fibrous tissue and scar formation just as noted after parenteral administration. An unexpected effect was the extremely accelerated absorption of soft lens substance post-operatively in two cases of linear cataract extraction.

Special mention should be made concerning the allergic kerato-conjunctivitis cases (10 eyes). These eyes were in allergic individuals and showed the typical diffuse conjunctival injection with pinpoint grayish elevations along the limbus. The symptoms were burning, itching, and photophobia. Complete relief of all symptoms and signs followed local use of cortisone and all of them have remained comfortable on only one drop twice daily.

ADDENDA:

Since submitting this data for publication, approximately 30 additional eyes have been treated by local instillation of cortisone. The beneficial effect on all types of inflammatory and allergic disorders has been observed repeatedly.

Acute eczema of the lids has cleared rapidly following application of cortisone solution to the involved skin areas several times daily.

Further experience with acute retrolental fibroplasia leads me to the conclusion that parenteral administration of cortisone is the method of choice.

As would be expected ACTH has no effect used locally.

THERAPEUTIC CONFERENCE*

The University of Oklahoma School of Medicine

Presented by the Departments of Pharmacology and Anesthesiology

ANESTHETIC EMERGENCIES

ROBERT F. REDMOND, M.D., HOWARD A. BENNETT, M.D.,
AND H. K. SOWELL, M.D.

DOCTOR REDMOND: Anesthesiology is a relatively new science. The first records of clinical anesthesia are only slightly more than 100 years old. The addition of a well trained, highly skilled anesthesiologist to the surgical team has made possible the successful performance of heretofore impossible procedures. The surgical approaches to the lung, the heart, and the great vessels have been developed as a result of progress in anesthesia, which make such procedures safe. The anesthesiologist is a specialist in pain, a specialist in sleep, a specialist in physiology, pharmacology and many other things. The individual who gives an occasional anesthetic probably gets into trouble more frequently than the trained anesthesiologist, even though the procedures undertaken by the occasional anesthetist are frequently less complicated than those which are done by the well trained man. We shall divide this problem of anesthetic emergencies into several categories. The more common emergencies which arise in anesthesia are those related to respiration. We can further subdivide this into first, the prevention of accidents or emergencies, and second, the treatment or what to do when one gets into trouble. First I would like to ask Doctor Bennett what is probably the most frequent of the things that trouble the anesthesiologist in the way of respiratory complications.

DOCTOR BENNETT: Respiratory obstruction is the most common cause of difficulty. This may occur anywhere in the respiratory tract. Obstruction may occur in the mouth or nose. Most obstructions are found in the pharyngeal regions. Complications may arise from obstruction in the tracheobronchial tree or actually in the pulmonary parenchymal tissue itself. Obstruction in the pulmonary parenchyme may take the form of edema, asthma or bronchospasm. Acute complete

obstruction of the respiratory passages is something that is intolerable to all concerned. It is incompatible with life. Irreversible damage to the central nervous system in particular and other organs, especially the heart, occurs in a very few minutes. Irreversible damage to the higher centers in the brain will take place in a matter of two or three minutes. Complete anoxia in that period of time will always result in death. Most of the problems in anesthesia revolve around respiratory difficulty, whether it be apnea, from failure of the respiratory mechanism, or obstruction to the respiratory passages. The person giving the anesthetic must provide diligent attention to the airway and the function of respiration. Thus far this has been a general discussion of the problem; we have not touched on any of the particular problems.

DOCTOR REDMOND: I think probably the first thing we should discuss in the way of prevention of some of these complications and inhibitions to proper aeration is the matter of premedication. I am going to ask Doctor Sowell to give us his thoughts on the importance and the use of premedication in preventing respiratory disturbances.

DOCTOR SOWELL: Premedication is as essential in properly handling the patient as is the anesthetic agent itself. One should always see the patient at least two hours prior to surgery. In seeing the patient one mentally jots down the patient's metabolic rate. Some, with one sentence, will give you the answer to that important part of the premedication regime. If it is necessary to take the patient immediately to the operating room, then intravenous narcotic and atropine or scopolamine should be used, judiciously of course. The length of surgery determines to a great extent the dosage of premedication.

DOCTOR REDMOND: Doctor Bennett, would you care to point out some of the things which can be avoided by the proper use of premedication? What are some of the respiratory complications that are more apt to

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

occur in an improperly premedicated patient?

DOCTOR BENNETT: The patient that comes to surgery is of course somewhat apprehensive about the whole procedure. One can't blame him. In order to allay apprehension and fear, premedication serves a useful purpose when properly timed and properly given. Say, for example, that premedication is given 30 minutes before surgery and anesthesia are to commence. The patient would come to surgery without much benefit from the administration of the premedication if it were given hypodermically. His induction would in all probability be wild, dramatic, eventful and perhaps he would jump off the table, fall on the floor, or some similar unfortunate event occur. These are accidents which do not occur commonly, but do occur. The atropine or scopolamine would not have achieved a drying effect on the secretion in the upper G. I. and upper respiratory tract. There would be considerable formation of mucous, which if excessive in amount can produce respiratory obstruction and require removal. In removing secretion one must take off the mask, and if the patient wakes up while this mucous is being removed, then one has to get the patient back to sleep again. Sometimes it is rather difficult to keep the mucous cleaned out and still get the patient to sleep. Perhaps he may aspirate some of the mucous into the lower tracheobronchial tree, which further complicates the situation. Undesirable reflex activities are more common in the poorly premedicated patient. They are more apt to become nauseated and vomit during induction, which may provide the source for aspiration of vomitus into the tracheobronchial tree. This is a serious accident. It provides an obstruction in the lungs, which is rather inaccessible without bronchoscopy or some sort of tracheobronchial aspiration. Perhaps there would be laryngospasm of a severe degree. Laryngospasm is forceful partial or complete adduction of the vocal cords. It is a protective reflex, but when a patient is asleep it becomes a double-edged sword. Laryngospasm can kill the patient just as well as if he had been strangled by some other means. Laryngospasm is to be prevented and proper premedication helps minimize this possibility. These are some of the more important aspects of proper premedication. There is one other thing. Suppose this premedication were given 20 minutes before anesthesia was to be induced and the patient was still without the benefit of premedication at the time of

induction. Thirty to 60 minutes later, right in the middle of the procedure, the full effect will be felt by the patient. In the meantime he had required a considerable amount of anesthetic agent for induction, so he would be pretty well saturated at that point. Then when premedication comes into bloom, so to speak, the patient is hit from two sides — on the one hand with the large amount of the anesthetic agent and on the other hand the additional depression from premedication. The patient might develop apnea, making it necessary to provide artificial respiration for a time, which would not be dangerous if the possibility were recognized and treated properly. But if it is not recognized, the patient might have some difficulty.

DOCTOR REDMOND: We have mentioned some of the things that can be prevented by proper premedication. Doctor Sowell, do you have any other points you would like to bring up about the prevention of some of these complications?

DOCTOR SOWELL: One of the common mistakes of the person who does not administer anesthesia very often is to insert an oropharyngeal airway early, i.e., while the anesthesia is light. This frequently precipitates a severe laryngospasm, or, especially with pentothal, a severe coughing attack, which may end in laryngospasm. The patient should be under surgical anesthesia before an oro-pharyngeal airway is inserted.

DOCTOR REDMOND: While you have the floor, will you discuss the treatment of laryngospasm after it has occurred.

DOCTOR SOWELL: The first thing, of course, is to have the anesthetic machine ready for immediate use. Artificial insufflation of the lungs with the bag and tightly fitted face mask is accomplished by manual compression of the bag during the attempted inspiration of the patient. After several attempts one hears the air whistle through. On the next two or three inspiratory attempts the patient usually will take in adequate oxygen. If this does not suffice, then perhaps 1/100 gr. of atropine intravenously, which is usually not handy, will relieve the laryngospasm. Perhaps two minutes have now passed and permanent anoxic damage is near at hand. If it is known that the pharynx is clear of mucous or other foreign material, one must now consider a tracheotomy.

DOCTOR BENNETT: I might add this. I yet have not seen a laryngospasm that could

not be broken with good hard compression of the rebreathing bag with a mask applied to the face. I hope I never do see one that can't be broken that way. That will take care of most of them. I think most everybody who has had experience with them will agree that manual pressure on the rebreathing bag will take care of laryngospasm.

DOCTOR REDMOND: Doctor Bennett, would you discuss the problem of anesthesia in the presence of pulmonary edema?

DOCTOR BENNETT: Usually pulmonary edema develops in the surgical patient on a basis of acute left ventricular failure, as in any other circumstance, probably associated with shock or circulatory overload. In the case of circulatory overload, one measure that is rather easily accomplished is the withdrawal of a certain amount of circulating blood volume from that patient. That will frequently help. Positive pressure applied to the rebreathing bag will help minimize the formation of edema on a mechanical basis. It will also relieve the heart by diminishing the venous return to the heart. It doesn't happen very often, but those measures will take care of most cases of pulmonary edema. Perhaps some cleansing of the airway will be necessary also because these patients may produce great quantities of edema fluid.

People put things in their mouths from the day they are born until they die. Particularly one finds foreign bodies of some sort in children and people who are of rather inadequate mentality. It is always a good rule to ask a child to show you his gum before he is given the anesthetic. The child won't be chewing the gum, he will just be sucking on it or holding it in his mouth. But it can give one a lot of difficulty before the cause is found. Gum, candy, and sometimes teeth become dislodged, or a whole false plate might become dislocated and slip back into the hypopharyngeal region. Another thing is snuff and chewing tobacco. We have even found a nail in the hypopharyngeal region in a psychopathic patient. How it got there and how he kept from coughing on it is a mystery, but there was a little nail down around his false vocal cords. Before the patient goes to sleep you should be sure there is nothing in his mouth that might cause obstruction after he is asleep.

DOCTOR REDMOND: Other types of foreign bodies may come from elsewhere in the body. Vomiting during induction or the re-

covery period of the anesthetic, unless the anesthesiologist is present or unless he has very carefully instructed the person in charge of the patient, may be a severe complication. The patient may rather quickly lose his life from anoxic anoxia as a result of aspiration of vomitus. Sometimes this is due to the aspiration of substances deep in the respiratory tract, or as happened one time that I can recall, as the result of a single string bean being caught between the true vocal cords and causing a rather severe degree of laryngospasm. Although it was possible to push air by the string bean, there was some danger of pushing the bean down the tracheobronchial tree by so doing. Doctor Sowell, would you care to say anything about this matter of vomiting and aspiration of vomitus?

DOCTOR SOWELL: Even though it is not a common practice to empty the stomach prior to surgery, at certain times one may find it a good trick to cause vomiting with one of the emetic drugs. Or, one may aspirate the patient with a large stomach tube. It might save a life some day.

Usually aspiration with a metal suction tip, during emesis, merely serves to aggravate the laryngospasm. One cannot aspirate large particles of food through the apparatus commonly provided. Put the head in a position to allow accumulated material to drop out as the patient opens and closes the mouth. A gag may be inserted at the proper time; the finger could then be used to remove the vomitus. Attempted insufflation of oxygen with the anesthetic machine at this stage is unwise, for one may facilitate the aspiration of a piece of food. Watchful waiting is the method of choice.

DOCTOR REDMOND: Doctor Bennett, do you have anything you wish to add to this problem of vomiting and aspiration?

DOCTOR BENNETT: I think the important thing is prevention; be careful, be cautious, think before you rush in and find yourself in trouble.

DOCTOR REDMOND: Here again we come back to the problem of preparation of the patient and staying out of trouble; and to summarize briefly, if the patient has little or nothing in his stomach he will not vomit. We may see some retching and gagging, but the patient can be pushed on through that stage if he has nothing to vomit. This complication will also be considerably minimized if the patient is properly premedicated. It

will further be minimized if the patient is not stimulated during the process of anesthesia. That is another thing we haven't mentioned. Do not allow the nurses or operating room attendants to disturb the patient while you are trying to put him to sleep. Such attendants may be tempted to remove a dressing or arrange the patient's gown or hands. They may anticipate a severe excitement stage and hold him tightly. As a result the patient is constantly being stimulated and he is constantly responding. Just as he is beginning to lose consciousness as he enters the second stage or the stage of excitement, the response may be explosive. This may result in the patient's trying to walk up the wall and across the ceiling. He may land on the floor, fracture a bone, dislocate a joint, or he may vomit and aspirate. Many complications can be avoided by just common sense and leaving the patient alone until he is in a state of surgical anesthesia. Only then may other procedures be carried on without excessive responses by the patient.

Another important point in this discussion is to know the machine you are using. In other words, take a minute if you have never used it before and see which knob regulates which particular gas, whether there are any holes in the tubing and whether the rebreathing bag will withstand firm compression without blowing out. See whether the connections are tight. Make sure that the mask will come at least fairly close to fitting the patient. It is difficult to have too much equipment when trouble comes. Certainly many patients have been lost because there didn't happen to be a laryngoscope readily available or no one knew how to use it although it was available. Many deaths in the newborn have occurred when somebody tried to keep the mother from delivering with heavy anesthesia; then the doctor arrives, the baby is delivered and the baby will not cry. A tube passed into the trachea of that infant with a little artificial respiration with oxygen through a "Y" tube is quite likely to prevent the loss of a life. When a woman goes through nine months of pregnancy and loses her baby, she is rather unhappy, and rightly so if it was an unnecessary loss. Some of the other complications which we have touched on I think perhaps we could discuss very briefly. We have mentioned the various types of obstruction due to the more mechanical factors. We have also discussed the influence of mechanical factors in producing reflex

disorders, and we have mentioned such things as pulmonary edema. I think we had better go on to circulatory complications. I would like to ask Doctor Sowell what he considers to be the most frequent circulatory complication in the practice of anesthesiology.

DOCTOR SOWELL: Shock is the principal circulatory complication, and cardiac irregularities are probably the cause of the next greatest concern. Shock must be watched for continuously and blood should be available for any case in which excessive blood loss is anticipated. In the event that blood is not available, replace blood loss with plasma. Saline or other fluids have no place in the treatment of shock — they merely promote pulmonary edema.

DOCTOR BENNETT: As Doctor Sowell mentioned, I think secondary shock, which was formerly and still is called surgical shock, is due for the most part to loss of circulating blood volume. Deep and prolonged anesthesia can also produce circulatory collapse. Suddenly produced deep anesthesia may produce primary cardiac failure, asystole, or sometimes ventricular fibrillation if there is some degree of anoxia and carbon dioxide retention. That is of course the emergency which doesn't happen too often, but when it does it is rather tragic and in most circumstances can be prevented. We might mention the treatment of cardiac arrest. I think in any young, healthy individual who has a good heart and has previously had a good heart and circulation, cardiac resuscitation should be attempted. Any surgeon should know how to make a transverse incision in the chest, reach in and perform artificial circulation by massaging the heart. The anesthetist should have simultaneously established artificial respiration with 100 per cent oxygen. Carry it out in that fashion so that artificial circulation and artificial respiration are established as soon as possible. If it is three to five minutes before these measures are attempted, one might just as well forget it, because the patient is irreparably damaged. Those two measures are about as much as we can say about cardiac arrest. It may be stimulated by reflex activities, traction on certain viscera, notably the lung. Usually it is accompanied by some anoxia or hypoxia, carbon dioxide retention or too deep anesthesia.

DOCTOR REDMOND: Here again it is the man who is on his toes who makes this diagnosis of cardiac arrest before the pa-

tient's mentality resembles that of an artichoke. The surgeon may not notice cessation of bleeding for several minutes. He may just think he has achieved good hemostasis, but the man who is administering the anesthetic is keeping a finger close to the pulse. He may notice asystole before the surgeon wonders if his patient is alive. It is unfortunate when the first cause for suspecting asystole is lack of bleeding, because it may be too late. The other complication that Doctor Sowell mentioned we will ask him to discuss. How does one prevent and treat cardiac irregularities?

DOCTOR SOWELL: Irregularities, in the patient who has no cardiac pathology, are most generally due to inadequate oxygen in the blood. Prevention and treatment are the same — provide adequate exchange of the anesthetic gas and adequate percentage of oxygen. Deep anesthesia may also produce irregularities. Reduce the depth of the anesthesia at once.

DOCTOR REDMOND: Doctor Bennett, are there other circulatory complications you would care to discuss?

DOCTOR BENNETT: We should mention that hypotension associated with spinal anesthesia is very common. This will usually develop in the first 10 or 15 minutes. The spinal is given, the patient is turned over, and in a matter of a few minutes severe hypotension may occur. It is a primary and neurogenic type of shock. There is no loss of circulating volume. The circulatory bed has become atonic and increased, so it is a relative affair. If it is not detected it may become extremely severe and the patient may be in difficulty before it is recognized. It is also interesting to know that respiratory arrest is frequently associated with this circulatory failure, probably on the basis of medullary ischemia. The medulla, which harbors the respiratory reflex, also contains the circulatory regulators. When this mechanism is without sufficient oxygen, circulation and respiration may both fail at once. I think most cases where the patient receives the spinal, is turned over, and in a few minutes is dead, are explained by this mechanism. It is very unlikely that it was

a sensitivity to the drug. I might mention circulatory collapse due to procaine and cocaine reaction. Usually it is due to an overdose of the drug. A large amount of the drug gets into the circulatory system and the circulation fails. This is another characteristic of this type reaction. Or there may be convulsions associated with it or respiratory failure. Again, prevention is the best means of avoiding these untoward or undesirable reactions.

DOCTOR REDMOND: Would you mention more specifically the prevention of hypotension from spinal anesthesia.

DOCTOR BENNETT: In the prevention of the hypotension associated with spinals, if you have a patient on whom you are going to do a spinal who has high blood pressure, is debilitated or is arteriosclerotic, a prophylactic pressor drug is indicated to support that patient during this period when hypotension may occur. Patients who receive spinals are much more apt to develop hypotensions and should be supported with prophylactic pressor drugs. The pressor drug given prophylactically is no guarantee that hypotension will not develop. The drug should be available for immediate intravenous injection if a severe hypotension should occur although an intramuscular pressor drug was given before the spinal. During this period of circulatory distress it is probably a good idea to give oxygen inhalations to provide a super-saturation of the blood that is circulating, thereby preventing tissue hypoxia. With procaine reactions it is a primary or neurogenic type of shock and the treatment is the same, except that in prophylaxis the pressor drug is not usually given in advance. It is mostly relied upon for treatment of these circulatory reactions. The preventive measures include avoiding the application of anesthetic drugs topically to areas where the mucosa is torn or broken and too rapid absorption can occur. Avoid using high concentrations of the drugs and in large amounts, always avoiding intravenous or intramuscular injection by aspiration before injection. Barbiturate premedication will minimize the convulsive manifestation of this type of reaction.

MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

"Rheumatic Fever" — Norman and Amelia Lobsenz — *Today's Woman*, October, page 48.

The appearance of this article was a very welcome one because the subject is one of such great importance and should be brought more and more into the eyes and thoughts of the public.

Some quotes from the article that would do for a starter — "Compared with the fatalities from rheumatic fever, polio is a piker and all the other childhood diseases are party games. It kills more youngsters and adolescents between the ages of five and 19 than anything except accidents. It kills five times as many as polio, whooping cough, diphtheria, scarlet fever, measles, and meningitis all put together. It directly causes more than 90 per cent of all heart diseases in children."

"In the last two years rheumatic fever got only about \$400,000 a year for research. Compare this with \$25,000,000 for polio, with \$14,000,000 to battle cancer."

To get more money for research you will need some big national figure who has had it to promote its research and these people are hard to find.

The article is exceptionally well written giving the experimental treatment going on but at first the article (which is unusual) states, "For one thing tests on six, 10 or a thousand patients are not enough to warrant definite conclusions." This is the first time I have seen the quotation and hope that other writers will take heed from it.

"Brain Food for the Backward Child" — Lois Miller — *Readers Digest*, October, page 93.

Glutamic acid, one of so-called non-essential amino acids was found (according to this author) to have helped raise the I.Q. and also the general mental outlook of those mentally deficient. A few cases are cited and with glowing results.

I do not know anything about this experimental phase but this author was somewhat reserved in her writing, which to me is a good sign. Let's hope it will do these children some good and at least it will help the mental depression of the parents of these children.

"Double Barreled Hope for Alcoholics" — Paul deKruif — *Readers Digest*, October, page 130.

This article is a hope giving piece and from what I have been able to ascertain, a great deal of truth to the substance. Adrenal cortical extract has been used for these unfortunates known as alcoholics. This one thing that most people hope can be conquered but as I understand the work on this material, it is still in the preliminary stage which the author fails to make clear.

"What to do About an Ulcer" — Henry La Cossett — *Colliers*, September 30, 1950, page 32.

The title should read "How to Prevent an Ulcer from Infancy". The author lays the cause of nearly all the ulcers to the internal conflict started in infancy by the habit of feeding junior when upset or the conflict between parents. If this was wholly true then I believe everybody would have an ulcer. The old saying of "Heaven help the man with one case" could surely be applied to this manuscript because the whole essence is built around one case history from one doctor's file. Also he lays all the cause and treatment through the obstacle course of the vagus nerve. The only good thing stated is the fact that common sense is the best preventive and cure but here we go again, "what is common sense". Is it the common man's sense or the consent of the public.

If a great many people read this they could get the idea that if they have an ulcer that mammy and pappy caused it.

MEET OUR CONTRIBUTORS

P. E. Russo, M.D., A.B.R., Oklahoma City, was one of the authors of "Newer Methods of Cholecystography" in this issue. A specialist in radiology, he was graduated from St. Louis University School of Medicine in 1930. He is a member of the American College of Radiology, Radiological Society of North America, American Roentgen Ray Society and has been certified by the American Board of Radiology. Doctor Russo is counselor, American College of Radiology, and chairman of the department of Radiology, University Hospital and Crippled Children's Hospital.

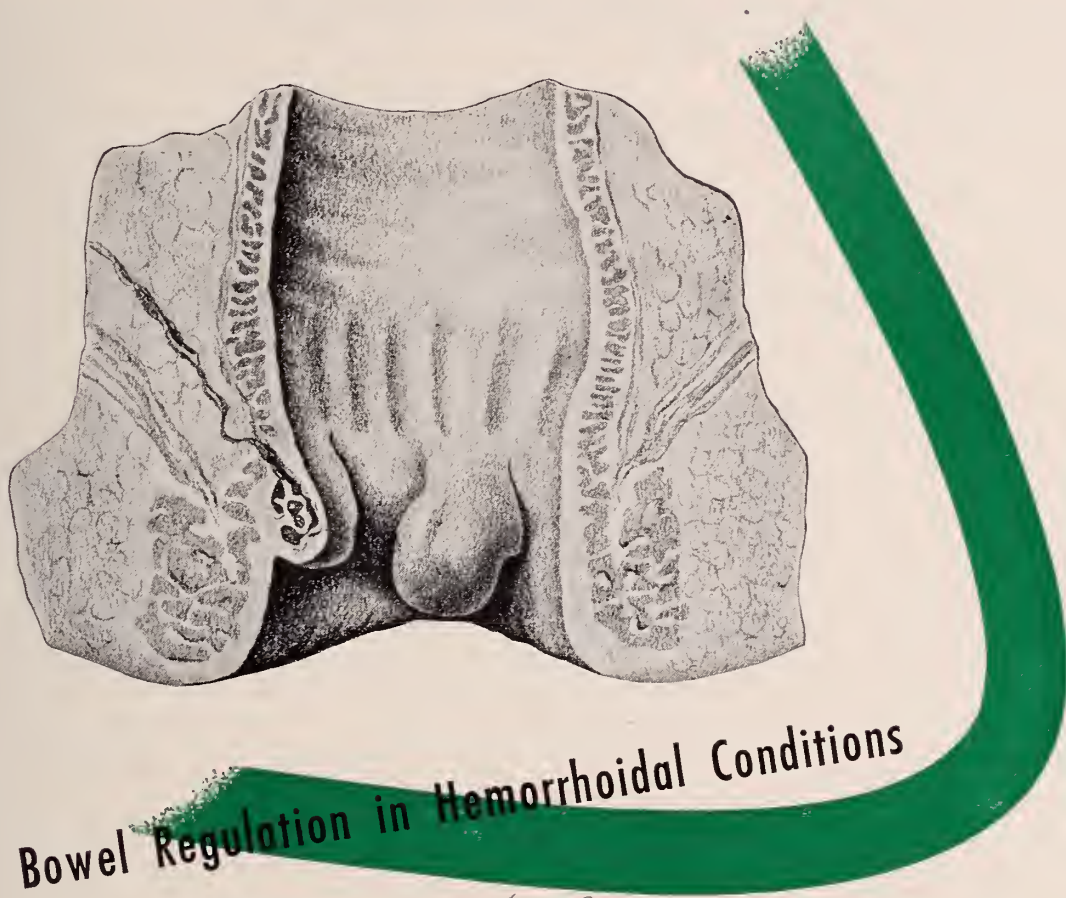
Clair J. Cavanaugh, M.D., Oklahoma City, was co-author of "Newer Methods of Cholecystography" in this issue. Doctor Cavanaugh was graduated from the University of Iowa in 1947 and is now associated with the University of Oklahoma School of Medicine.

Robert R. Kierland, M.D., M.S., Rochester, Minnesota, a guest speaker at the annual meeting has a paper on "Treatment of Common Skin Diseases" in this issue. Doctor Kierland was graduated from the University of Minnesota in 1933. His specialty is dermatology and Syphilology. He has been certified by the American Board of Dermatology and Syphilology. Doctor Kierland is president of the Minnesota Dermatological Association, American Dermatological Association, American Academy of Dermatology and Syphilology, Society of Investigative Dermatology and Consultant for Veterans Administration and United States Public Health Service. He is president of the Minnesota Dermatological Association. Before coming to Rochester, he was in general practice in Minneapolis from 1934 to 1936.

Tullio O. Coston, M.D., Oklahoma City, has an article on "Personal Experiences with ACTH and Cortisone Therapy" in the November issue. Doctor Coston, whose specialty is ophthalmology, was graduated from Johns Hopkins University in 1930. He has been certified by the American Board of Ophthalmology. He is a member of the Johns Hopkins Medical and Surgical Society, Wilmer Residents Society, and American Academy of Ophthalmology and Otolaryngology.

E. D. Greenberger, M.D., F.A.C.R., McAlester, wrote "Outside Looking In — The Acute Abdomen". Specializing in radiology, he is a member of the Radiological Society of North America, and a Fellow of the American College of Radiology. He was graduated from New York University Medical College in 1932. He has practiced in McAlester since 1935 with the exception of three years in the service in World War II. He is vice-president of the Pittsburg county society.

John S. Knight, M.D., M.A., M.Sc., Kansas City, is the author of "What the Family Medical Advisor Should Know About Fenestration Surgery" in the November Journal. Doctor Knight, who limits his practice to his specialty, otolaryngology and broncho-esophagology, was graduated from the University of Pennsylvania in 1925. Doctor Knight is a member of the American Academy of Ophthalmology and Otolaryngology, American Broncho-Esophagological Association, American College of Chest Physicians, Kansas City Society of Ophthalmology and Otolaryngology, Kansas City Southwest Clinical Society, Kansas City Anatomical Society and is president of the Kansas City Society of Ophthalmology and Otolaryngology and Association, Otolaryngology, University of Kansas School of Medicine.



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President's Page

Within the next few days, people all over this free country of ours which we are proud to call America will be going to the polls to vote. It is hoped that every individual in this great land will exercise his or her right of franchise. Doctors of medicine should not be expected to take any more interest than any other group of people or profession except for the fact that our own profession is being subjected to a great deal of unfair and unwarranted criticism at this particular time. It is the solemn duty then of every individual doctor to be cognizant of the many attacks made on the profession. For example, during the past year the Oklahoma State Medical Association records were scrutinized by the F. B. I. and also the records of the Beckham County Society and those of Blue Cross and Blue Shield. This investigation is only one of some 25 such medical societies which have been checked. The American Medical Association has been entertaining members of the Federal Bureau of Investigation for several months. The Illinois State Society records are now being carefully gone over.

Several anti-trust suits similar to the Staff of the Community Hospital at Elk City, versus the Beckham County Society have been filed. However, during the past few weeks there has come a ray of hope and encouragement from two such suits. On September 28th of this year, Judge Claude McColloch ruled that Oregon's organized medicine has not violated the Sherman anti-trust act in its prepaid service, and that Oregon Physician's Service is not a conspiracy but rather an entirely legal and legitimate effort by the profession to meet the demands of the times for broadened medical and hospital service.

In another suit in the State of Washington in which the facts were very similar to those in the case of the Community Hospital versus the Beckham County Society, Judge Howard M. Findley of the Superior Court of King County ruled in favor of the defendants which were the Members of the King County Medical Society versus Group Health Cooperative of Puget Sound. Why have these attacks been made on the profession except to intimidate the members and put them in a bad light before the American Public. Who do you suppose instigated these insults; every doctor must already have the answer.

Many bills were presented in Congress during the last session setting up some form of Government medicine; fortunately not one was ever permitted to come close to passing either house. It is reliably reported that one Congressman who has an entrée to the White House at all times is none other than Andy Beimler of Wisconsin. He is responsible for submitting four bills in the Congress this year; all having to do with giving Federal Aid to medical education. Again, these have all been defeated. The recent attacks on the American Medical Association and its National Advertising Program by the Federal Security Administrator, Oscar Ewing, first at the meeting of A. F. L. in Houston and secondly, before American Jewish Congress is certainly sufficient to arouse resentment and incite the wrath of every doctor in our country.

The pamphlet which has been prepared and distributed by the Democratic National Committee entitled "Better Medical Care Than You Can Afford" and also the "Training Kit for Leaders" is another piece of propaganda. It is a discussion of the "Administration Health Program" in which an attempt has been made to protest voluntary insurance as compared with government insurance. The information contained in this booklet is like the entire program for compulsory health insurance; it is surrounded by misinformation, misrepresentation of facts and simple fallacies. The claims for governmental medicine are exaggerated and impossible. It is hereby suggested that every doctor obtain a copy of this booklet and familiarize himself with its contents before voting time.

The results of the coming election will determine to a degree the seriousness of the battle between governmental medicine and the voluntary system for the next two years. Therefore, it is the duty of every doctor to acquaint himself with those seeking election and vote for those who in your judgment will help to maintain the American way of life.

Now is the time to learn the art of good citizenship and the dangers of lethargy and non-voting:

- A. Be sure to vote and see that every eligible member of your family votes.
- B. Provide time for yourself and your employees to vote and encourage others to do likewise.
- C. Ask your patients to vote and encourage those who will be in the hospital on election day to make use of the Absentee Ballot.
- D. Offer your ear to the Auxiliary who are doing such a wonderful job in this fight.
- E. Remember that important elections have been won or lost by *one* vote. It could happen again and that vote might be yours.

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DOCTORS DRAFT AUTHORIZED BY CONGRESSIONAL ACTION

Receiving the approval of the profession generally throughout the nation, Public Law No. 799, providing for special registration, classification, and induction of certain medical, dental and allied specialist personnel was passed September 9, 1950. The law, which was passed in an unusually short time, was actively supported by the Oklahoma Physicians Veterans organization.

The law amends the Selective Service Act by adding the following provisions:

Authorizes the President to require special registration of and on the basis of requisitions submitted by the Department of Defense and approved by him, to make special calls for male persons qualified in needed medical, dental, and specialist categories who have not reached the age of 50 at the time of registration.

Provides that persons called shall be liable for induction for not to exceed 21 months of service. Further, that reserves will not be liable for registration or induction since they are already subject to direct call from their component military service.

In registering and inducting persons covered by this public law, the President is authorized to register and induct in the following order of priority:

1. Former ASTP and V-12 students and such persons who were deferred during World War II for the purpose of pursuing a course of instruction in one of these covered categories, who have had less than 90 days of active duty in the armed forces or the Public Health Service, exclusive of the time spent in postgraduate training.

2. The same group as covered in the first category who have had 90 days or more but less than 21 months of active duty in the military or Public Health Services, exclusive of the time spent in postgraduate training.

3. Those who did not have active service in the military or Public Health Services subsequent to September 16, 1940.

4. Those not included in the first and second priorities who have had active service in the military or Public Health Services subsequent to September 16, 1940. Induction of persons in this fourth priority group shall be made in accordance with regulations providing that those who have had the least amount of service shall be called ahead of those with more service.

Provides for deferment of covered registrants whose deferment is found to be equitable and in the national interest. Expresses the wish of Congress that the President shall provide for the annual deferment of pre-medical, etc. students at least equal to the number of such students in attendance at colleges and universities in the United States at the present levels.

Provides that a National Advisory Committee be established to advise the Selective Service System and to coordinate the work of state and local voluntary and advisory committees as may be established to cooperate with the National Advisory Committee. The committee is intended to parallel the Procurement and Assignment program of World War II.

Provides that any reserve officer called to active duty with or without his consent shall be entitled to the \$100 per month pay bonus.

The rules and regulations for administration of the bill have not yet been issued. Until that time, it is not clear just how those affected by the draft law may qualify themselves for the \$100 a month pay bonus.

MILITARY SERVICE COMMITTEE ASSISTS ARMED FORCES

Organization of the Oklahoma State Medical Association Committee on Military Service has been completed and county societies have been requested to appoint county committees on military service which will act in an advisory capacity to the state committee in matters affecting the individual counties. Members of the state committee, of which F. Redding Hood, M.D., Oklahoma City, is chairman, include: A. N. Deaton, M.D., Wewoka; C. M. Bloss, M.D., Holdenville; Roy L. Fisher, M.D., Frederick; Lee Willhite, M.D., Perkins; Ray Lindsay, M.D., Pauls Valley; W. G. Chestnut, M.D., Miami; Jack L. Myers, M.D., El Reno; R. R. Coates, M.D., Chickasha; A. T. Baker, M.D., Durant; F. C. Lattimore, M.D., Kingfisher; Joe L. Duer, M.D., Woodward; W. D. Hoover, M.D., Tulsa; J. D. Shipp, M.D., Tulsa; J. F. Park, M.D., McAlester; J. B. Hollis, M.D., Mangum; Shade Neely, M.D., Muskogee; and Milam F. McKinney, M.D., Oklahoma City. The committee is fully representative, both geographically and by councilor districts, and also representative of World War I veterans, World War II veterans and non veterans.

In the calling up of reserve medical officers, the committee has cooperated fully with the Oklahoma Military District and has in turn received full cooperation not only from the Military District but from the Fourth Army. It should be emphasized however, that it has not been the function of the committee to select the reserve officers who will be called to active duty. That selection is essentially the prerogative of the Military District. The committee is not in a position to question those selections except in instances in which the medical care available in the community from which a particular reserve officer is called will be adversely affected.

RESERVE QUOTA CUT

Oklahoma's quota of reserve medical corps officers has been cut from 14 to nine, the Fourth Army has announced through the Oklahoma Military District.

As has been previously announced in the press, the military forces, notwithstanding the passage of the doctor draft bill, will continue to call up reserve medical corps officers as the need may arise, when such officers cannot be secured through the doctor draft act.

It is thought that such reserve officers recalled to duty will, in the majority of instances, be those with training in the specialty fields. While it is not known whether or not there will be additional calls for reserve officers, recent releases from the army indicate as medical installations are re-opened and activated, such calls for reserve officers probably will be necessary.

A few physicians seem to be confused as to whether or not they are now in the reserve. It is suggested that all physicians who may have any doubt as to their present status should immediately write and secure an official determination. To ascertain his status, a physician should write to the appropriate address in the following list for authoritative information.

ARMY—Oklahoma Military District, Tinker Air Field Base, Oklahoma City.

NAVY—Eighth Naval District, New Orleans, Louisiana.

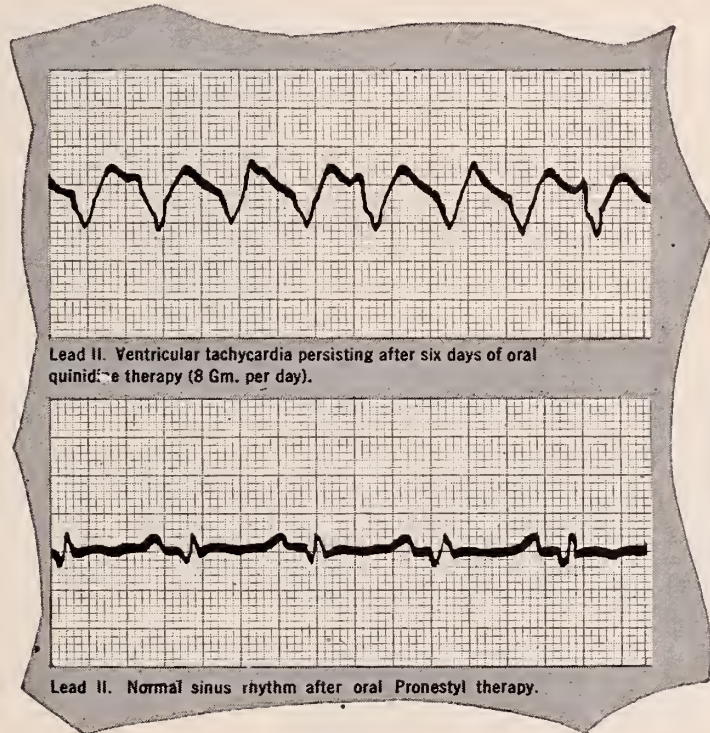
AIR CORPS—Headquarters, 14th Air Force, Robins Air Force Base, Georgia.

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Oral administration of Pronestyl in doses of 3-6 grams per day, for periods of time varying from 2 days to 3 months, produced no toxic effects as evidenced by studies of blood count, urine, liver function, blood pressure, and electrocardiogram. Pronestyl may be given intravenously with relative safety.

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A.M.A. MEETS IN CLEVELAND DECEMBER 5-8

Better start now, Doctor, plotting a scheme for a colleague to take your OB calls for a week so that you can get out of the office for a holiday and that "clinical refresher" awaiting you at the A.M.A. Cleveland Session for General Practitioners, December 5-8.

Cleveland won't offer the abalone steaks and cable cars of San Francisco or the boardwalk beach of Atlantic City — but it will offer you, besides the four days of demonstrations and lectures, ample opportunity to take care of the inner man at fine restaurants with evenings of relaxing entertainment at its most modern theatres.

Clinical sessions will be under outstanding teachers with attendance at these meetings limited so that you can enter into the discussions and inquire about your own problems. Doctors will hear leading medical authorities discuss treatment of actual cases of cancer.

The scientific exhibit will offer special demonstrations on fractures, diabetes, rheumatism and arthritis. Technical exhibits will feature the latest developments in drugs, equipment, books and allied medical products.

Meetings of the House of Delegates will be open to all members of the medical profession, and visitors in related fields are welcome to attend the sessions which will be held Tuesday and Wednesday, December 5 and 6.

Color telecasts of surgery, clinical treatment and examination at University Hospital in Cleveland are earmarked as one of the highlights of the meeting.

Another outstanding event will be the election of America's typical family doctor to receive one of medicine's highest honors — the General Practitioner's Award. Doctors in line for this recognition are nominated annually by local and state medical societies and elected by the House of Delegates. The award goes to the doctor who best exemplifies the profession's standards of service to patients, community and country.

Last year's Clinical Session in Washington, D. C. drew over 4,000 doctors from every part of the United States. This year, the A.M.A. has issued a blanket invitation to all members of the Canadian Medical Association, which should increase normal attendance.

CARDIOLOGY COURSE SLATED FOR TULSA NOVEMBER 15-17

Sponsored by the Division of Postgraduate Instruction of the University of Oklahoma School of Medicine and the Tulsa Heart Association, a three day post graduate course in Cardiology will be held in Tulsa, Oklahoma, November 15, 16, and 17, 1950.

One of the guest instructors will be Thomas J. Dry, M.D., Mayo Clinic, Rochester, Minnesota. Advanced registration fee is requested and is \$15.00. Registration fee should be sent to the Office of Postgraduate Instruction, University of Oklahoma School of Medicine, 801 N. E. 13th., Oklahoma City, Oklahoma.

TRAUMATIC AND DISASTER SURGERY CIVILIAN DISASTER SYMPOSIUM GIVEN AT MEDICAL SCHOOL

More than 50 physicians attended the postgraduate course in traumatic and disaster surgery and 100 lay personnel emolled in the symposium to civilian preparedness held in October at the University of Oklahoma School of Medicine. While most of the enrollments came from Oklahoma, several were enrolled from bordering states with attendance recorded from Kansas City, Denver, and New Orleans.

Courses were sponsored by the Oklahoma State Department of Health, Oklahoma State Medical Association and the Department of Surgery and the Division of Postgraduate Instruction of the University of Oklahoma School of Medicine.

Guest instructors included Lt. Col. Michael D. Busecemi, M.D., Assistant Director Department of Medicine and Surgery, Medical Field Service School, Fort Sam Houston, Texas; Oscar P. Hampton, Jr., M.D., Instructor Orthopedic Surgery, Washington University School of Medicine, St. Louis, Mo.; Capt. Meredith Mallory, M.D., Instructor, Department of Medicine and Surgery, Medical Field Service School, Fort Sam Houston, Texas; John E. McDonald, M.D., Tulsa, Visiting Lecturer of Orthopedic Surgery, University of Oklahoma School of Medicine; Mr. Donald G. Nelson, Radiological Health Branch, United States Public Health Service, Washington, D. C.; Howard E. Snyder, M.D., Lecturer in Surgery, University of Kansas; and Edwin G. Williams, M.D., Chief, Radiological Health Branch, United States Public Health Service, Washington, D. C. Several Oklahoma City physicians also appeared on the program.

An orientation course designed to present basic facts in handling casualties of any sort with emphasis being placed upon radiation injuries because of their newness, films and discussion periods were included on the program.

INTERNAL MEDICINE COURSE OFFERED IN S. W. PART OF STATE

Physicians in the southwestern Oklahoma area who wish to enroll in the postgraduate Course in Internal Medicine are asked to mail their enrollment cards and fee to the Executive Office, 1227 Classen, Oklahoma City as soon as possible. Fee for the 10 week course is \$20.00.

The Internal Medicine course will begin in the seventh circuit November 27 with Clinton, Elk City, Altus, Mangum and Hobart as the teaching centers. Instructor is Robert M. Becker, M.D. Physicians are reminded that the course will recess during the Christmas holidays.

Doctor Becker will complete his instruction in the sixth circuit November 24 where teaching centers were Oklahoma City, Shawnee, Wewoka, Norman and Pauls Valley. Attendance has been reported excellent in all sections of the state during the year and a half that the course has been in progress.

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Take a puff — DON'T INHALE.
Just s-l-o-w-l-y let the smoke come
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and s-l-o-w-l-y let the smoke come
through your nose. Notice that bite,
that sting? Quite a difference from
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to your patients who smoke?



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**Proc. Soc. Exp. Biol. and Med.*, 1934, 32, 241-245; *N. Y. State Journ. Med.*, Vol. 35, 6-1-35, No. 11, 590-592;
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; *Laryngoscope*, Jan. 1937, Vol. XLVII, No. 1, 58-60

ST. LOUIS IS SOUTHERN MEDICAL 1950 CONVENTION CITY

St. Louis Medical Society is host to the Southern Medical Association when it meets in that city November 13-16, 1950 for the 44th Annual Meeting. A complete Frisco overnight train schedule appears on this page for the convenience of Oklahoma physicians.

All meetings, exhibits, and registration will be held in Kiel Municipal Auditorium which will be General Headquarters. There will be no hotel headquarters but transportation is not difficult from any of the leading hotels.

The first two days of the meeting, Monday, November 13, and Tuesday, November 14, will be occupied with general clinical sessions covering the whole field of medicine. There will be medical and surgical sessions each of these days conducted by men outstanding in special fields. Each session will be followed by a question and answer period. The following two days, Wednesday and Thursday, November 15 and 16, meetings of the 21 sections will be held. There also will be several conjoint meetings.

Scientific exhibits are expected to be outstanding because of the position of St. Louis as a medical center and its two widely known medical colleges.

Tuesday evening, November 14, there will be a subscription dinner for all members of the Association and their guests, followed by a dance. Special tables may be reserved for parties.

Hotel reservations clear through the Housing Bureau, Southern Medical Association, 911 Locust Street, Room 406, St. Louis, Mo.

OVERNIGHT TRAIN SERVICE, DIESEL POWERED STREAMLINED TRAIN "THE METEOR"

SOUTHERN MEDICAL ASSOCIATION,

ST. LOUIS, Nov. 13, 14, 15, 16, 1950

SCHEDULE

Lve. Okla. City	Frisco 7:00 P.M. daily
Lve. Sapulpa	Frisco 9:03 P.M. daily
Lve. Tulsa	Frisco 9:45 P.M. daily
Arrv. St. Louis	Frisco 7:45 A.M. next day
Lve. St. Louis	Frisco 7:00 P.M. or 11:20 P.M. daily
Arrv. Tulsa	Frisco 5:30 A.M. or 10:00 A.M. next day
Arrv. Sapulpa	Frisco 6:18 A.M. or 10:43 P.M. next day
Arrv. Okla. City	Frisco 8:25 A.M. or 1:30 P.M. next day

RATES

RAILROAD

From Okla. City From Tulsa

Round trip fare to St. Louis	\$36.40	\$28.52
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PULLMAN

Lower berth rate to St. Louis	\$ 6.15	\$ 5.52
Roomette rate to St. Louis	8.63	7.65
Bedroom rate (1 passenger) to St. Louis	11.67	10.47
Bedroom rate (2 passengers) to St. Louis	13.51	12.13

L. J. STARRY, M.D., HEADS S. W. SURGICAL CONGRESS

L. J. Starry, M.D., Oklahoma City, took office as president of the Southwestern Surgical Congress at the second annual meeting of the group in Denver, September 25-27.

Another O.S.M.A. member, C. R. Rountree, M.D., Oklahoma City, is secretary of the group. Officers elected at the meeting include Michael Ellis DeBakey, M.D., Houston, president-elect; and Kenneth C. Sawyer, M.D., Denver, vice-president.

Next year the Southwestern Surgical Congress will meet September 24, 25, 26 at the Jefferson Hotel, St. Louis.

GRIEVANCE COMMITTEE URGES COOPERATION

Grievance Committee of the Oklahoma State Medical Association, now in its second year of operation, is continuing to consider the complaints of patients concerning fees and service of the members of the profession. The Committee has been encouraged by the fact that the number of such complaints has been relatively small. The Committee would like to call to the attention of the membership that it cannot succeed in discharging its responsibility to the profession and the public without the wholehearted cooperation of every member of the Association.

The Committee's procedure for the investigation and consideration of complaints has been designed to safeguard completely the rights and interests of any physician against whom a complaint is filed. The very procedure places on each physician the responsibility of cooperating with the Committee in the course of its investigation.

Aside from the complaints of individual patients, the Committee from time to time receives suggestions and criticisms from other organizations and governmental agencies. Since such matters often affect very materially the public relations of the profession, they are given every consideration by the Committee.

Among those suggestions has been one received from the State Department of Health indicating that in some instances doctors of medicine in the state have refused to file birth certificates as required by law and the rules and regulations of the department. In that connection, the Committee wishes to point out to every member of the Association the pertinent provisions of the statute which require the filing of birth certificates by physicians in attendance at birth.

The following citations are from the Vital Statistics Law found in the 1949 Cumulative Supplement to the Oklahoma Statutes 1941, and read as follows:

TITLE 63, SECTION 560.3, PARAGRAPH A. "Within the time prescribed by the commissioner a certificate of every birth shall be filed with the local registrar of the district in which the birth occurred, by the physician, midwife, or other legally authorized person in attendance at the birth; or if not so attended, by one of the parents."

TITLE 63, SECTION 560.4, PARAGRAPH A. "A certificate of every death or stillbirth shall be filed with the local registrar of the district in which the death or stillbirth occurred within three days after the occurrence is known; or if the place of death or stillbirth is not known then with the local registrar of the district in which the body is found within 24 hours thereafter. In every instance a certificate shall be filed prior to interment or other disposition of the body."

TITLE 63, SECTION 560.13, PARAGRAPH C. "Except where a different penalty is provided in this section any person who violates any of the provisions of this Act or neglects or refuses to perform any of the duties imposed upon him by this Act, shall be fined not more than One Hundred Dollars (\$100.00)."

It should be pointed out that the above provisions are mandatory and do not permit the physician to delay the filing of a birth or death certificate in an effort to collect his fee.

HAVE YOU HEARD?

Thomas Dobbins, M.D., Beckham-Custer county health physician for the past three years and a retired colonel in the U.S. army, was called back to duty at Jefferson Barracks, Mo., in September.

Tom Wainwright, M.D., Mangum, spoke on the prevention of emotional conflicts through mental hygiene at the Mangum Business and Professional Women's club recently.

H. E. Denyer, M.D., Bartlesville, spoke on hayfever at the weekly Kiwanis club luncheon in that city September 13.

J. E. Childers, M.D., has re-opened his clinic in Tipton, Oklahoma after being ill for several months.

Robert C. Tavlin, M.D., has recently moved from Moreland to Okeene.

A. A. Hellams, M.D., psychiatrist who has just returned from two years duty in Tokyo, Japan, where he was in charge of the army's psychiatric center, has opened a private practice in association with the Coyne Campbell Clinic, Oklahoma City.

M. B. Scott, M.D., and Mrs. Scott, Delaware, celebrated their 50th wedding anniversary September 12.

C. L. Johnson, M.D., Bartlesville, was named chairman of the Washington district of the Boy Scouts recently.

Claire B. Sledge, M.D., is now associated with the Rutherford-Dixon Clinic in Midwest City.

W. R. Miller, M.D., has returned from Sterling, Nebraska and is now associated with *O. G. Bacon, M.D.*, Frederick.

H. G. Ryan, M.D., Healdton, is now stationed at Camp Polk, La., with the 45th division.

James M. Bayless, M.D., a graduate of the University of Oklahoma School of Medicine, is now practicing at Boise City, Oklahoma.

Arlo Cox, M.D., Watonga, is taking a year's leave of absence and is moving to Marianna, Florida. He will enter the Public Health service and will be director of a two county health unit in Florida.

Rush L. Wright, M.D., Poteau, is the new chairman of the LeFlore County Red Cross chapter.

G. H. Yeary, M.D., has opened a new clinic in Newkirk.

J. E. Wallace, M.D., Tulsa, has received an engraved certificate and a silver medal hanging from a tiny replica of the Cuban flag from the Cuban government for his contribution to the Cuban liberation from Spain.

John Lamb, M.D., Oklahoma City, spoke at a General Practitioners meeting in Salt Lake City, Utah in September. His topics were "Eczema, Diagnosis and Treatment," "Therapy of Acne," "Psychogenic Factors in Dermatoses," "Cancer and Pre-Cancer of the Skin." Doctor Lamb also visited Colorado Springs, Manitou, Estes Park, Yellowstone Park and Idaho Falls.



PHYSICIANS of the South have an urgent call to St. Louis for the annual meeting of the Southern Medical Association, Monday, Tuesday, Wednesday and Thursday, November 13-16. Medical meetings are essential in times of war as well as in times of peace. In the light of the world situation today this meeting of the Southern Medical Association may be the last complete general medical meeting to be held for some time to come. With this thought in mind, it is very important that all physicians take advantage of this opportunity to bring themselves up to date on the latest developments in the profession.

THE ST. LOUIS meeting will be one of the most complete medical meetings ever offered to the profession. Every phase of medicine and surgery will be covered in the general clinical sessions, the twenty-one sections, the five conjoint meetings and the scientific and technical exhibits.

REGARDLESS of what any physician may be interested in, regardless of how general or how limited his interest, there will be at St. Louis a program to challenge that interest and make it worthwhile for him to attend.

MEMBERS of state and county medical societies may attend. Eligible physicians, members of state and county medical societies in the South can be and should be members of the Southern Medical Association. The annual dues of \$8.00 include the Southern Medical Journal, a journal valuable to physicians of the South, one that each should have on his reading table.

SOUTHERN MEDICAL ASSOCIATION
Empire Building
BIRMINGHAM 3, ALABAMA

PIONEER PHYSICIANS HONORED BY 50 YEAR PINS, LIFE MEMBERSHIP

Four of Oklahoma's pioneer physicians have joined the ranks of the 50 Year Club and a Life Membership has also been awarded. All presentations were made by O.S.M.A. President Ralph McGill, M.D., Tulsa, at a meeting of the Tri-County (Choctaw-McCurtain-Pushmataha) Medical, Dental and Pharmaceutical Society. New members of the 50 Year Club are J. T. "Thad" Moreland, M.D., Idabel; Robert L. Gee, M.D., Hugo; Lemuel E. Gee, M.D., Broken Bow; and John S. Lawson, M.D., Clayton. Addie W. Clarkson, M.D., Valliant, was presented a Life Membership.

Doctor Moreland, who was the first member of the medical society in his county, attended Chattanooga Medical College, Tennessee, 1896-1899. Before graduating from Chattanooga in 1901, he practiced medicine in Hemstead County, Arkansas, after passing an examination given by the county board of examiners at Washington, Arkansas. Following his graduation he returned to his home town of Ellijay, Georgia, and practiced there until 1903 when he came to Mitchell (now Idabel, Oklahoma). Doctor Moreland was one of a family of seven and recalls, "My parents were poor and so could not send me off to college, and so I went to work and made my own way. You will readily understand why I did not finish up school right along, as I had to work some and attend school some, and in this way finish up my college education." He was born May 8, 1871.

Born near Prescott, Arkansas, January 25, 1878, Doctor Robert E. Gee has practiced in Hugo since 1914. He entered Beannmont, Marion, Sims Medical College, St. Louis, Mo., in 1898, and after his second year in college he passed the board of medical examiners in Prescott, Arkansas, and received a license to practice medicine in Boughton, Arkansas. Practicing there till 1901 when he entered the College of Physicians and Surgeons in St. Louis, Mo., he returned to Arkansas, practicing at Prescott following his graduation in 1903. He moved to Fort Towson, Indian Territory in 1904. Doctor Gee was president of the Choctaw County Medical Society the first year of statehood. In 1907 he did postgraduate work in the New York Postgraduate College and was resident surgeon in the South Baltimore Eye, Ear, Nose and Throat Hospital in 1913-14. Following his residency, he came to Hugo where he has lived since that time.

Spending his boyhood on a farm in Texas, Lemuel E. Gee, M.D., was born June 24, 1878 at Gladewater, Texas. He received his medical education at the Memphis

Hospital Medical School and began his medical practice in June, 1900, under a preceptor. He received his M.D. degree in 1901, and immediately came to Indian Territory where he located at Wade, later moving to Caney, I.T. While in Atoka County, he was secretary of the county medical society for many years.

In 1929 he moved to Texas and practiced at Greenville where he was full time county health officer for seven years until he returned to Oklahoma as resident doctor of the Dierks Lumber and Coal Company at Broken Bow. The immediate past president of the Choctaw-McCurtain-Pushmataha Society, he is still in private practice and physician for the Dierks Company.

Another native Georgian is John Lawson, M.D., Clayton. Now 78 years old, he lived in Atlanta until he was 11. As a young boy he helped farm and worked in gold and coal mines in Alabama and Georgia. Then his father moved the family west to Arkansas and on into the Choctaw country around 1889. Doctor Lawson attended medical school at the University of Tennessee and was graduated in 1901. He set up practice in the San Bois area, then at Mayssville, going to the Pushmataha region in 1909. Doctor Lawson is still practicing and still covering a 25 mile circle around the rugged mountain country.

A. W. Clarkson, M.D., who retired in 1945, was awarded a life membership. Friends depict his life as one of hard work, personal sacrifice and service to humanity. He was born September 27, 1869, in St. Claire County, Missouri, near the county seat town of Ocoola. When only four years of age, his father moved the family across the Indian Territory by covered wagon. The family settled in the Faught community, near Paris, Texas, and engaged in farming. Doctor Clarkson attended the community school at Faught, and spent two years in Doctor Gowdy's school for boys at Paris, Texas. Doctor Clarkson attended Tulane University at New Orleans for three years graduating with honors in 1892. His graduation thesis was written on "Swamp Fever or Malaria Hematuria". This thesis stimulated him to settle in Manchester, Texas, a settlement just out of the Red River bottom, as many cases of swamp fever were occurring in the community at that time. In 1895 he married Miss Mattie Womack. Dr. and Mrs. Clarkson had six children. He practiced medicine and farmed in Red River country for 20 years but in 1912 moved to Valliant, Oklahoma in order to be near a high school for his children. He practiced medicine in that community until his retirement.

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ANNOUNCEMENTS

SOUTHERN MEDICAL ASSOCIATION. November 13-16, 1950, St. Louis, Mo. For reservations address the Housing Bureau, Southern Medical Association, 911 Locust Street, Room 406, St. Louis 1, Mo. No hotel will be designated as general hotel headquarters as all meetings and scientific and technical exhibits will be held in Kiel Municipal Auditorium. A complete Frisco train schedule to St. Louis appears elsewhere in this issue.

AMERICAN COLLEGE OF PHYSICIANS. Thirty-second annual session, April 9-13, 1951, St. Louis, Missouri.

AMERICAN MEDICAL ASSOCIATION INTERIM SESSION. December 5-8, Cleveland, Ohio.

AMERICAN COLLEGE OF CHEST PHYSICIANS. November 13-18, 1950. Hotel New Yorker, New York, New York.

AMERICAN DIABETES ASSOCIATION. November 12-18 is Diabetes Detection Week. Last year's campaign uncovered approximately 7,500 hidden diabetics throughout the country. Physicians are asked to co-operate with the self-testing A.M.A. approved program.

PEDIATRIC POSTGRADUATE COURSE. The University of Arkansas School of Medicine, Little Rock, announces a postgraduate course in pediatrics at the University of Arkansas School of Medicine November 6 and 7, 1950. The course is sponsored by the Pediatric Department, University of Arkansas School of Medicine, Maternal and Child Health Division of the State Board of Health and the Arkansas Medical Society. Two prominent speakers are scheduled for the program. All interested physicians, nurses and public health workers are invited to attend. No fee will be charged.

SOUTHWEST REGIONAL CANCER CONFERENCE. Tarrant County Medical Society announces the fourth annual Southwest Regional Cancer Conference will be held in Fort Worth, Texas, November 14 and 15, 1950, at the Blackstone Hotel, under the auspices of the Tarrant County Medical Society and the Tarrant County Unit of the American Cancer Society. Guest speakers will include: Carl Eggers, M.D., orthopedist, Galveston; A. J. Donnelly, M.D., pathologist, Philadelphia; William S. McClune, M.D., surgeon, Washington, D.C.; U. V. Fortmann, M.D., radiologist, Cleveland; Peter A. Rosi, M.D., surgeon, Chicago. The conference will consist of a tumor clinic on the evening of November 14, and morning and afternoon sessions on November 15. There will be no registration fee. Any other information may be obtained by writing the Tarrant County Medical Society, 209 Medical Arts Building, Fort Worth 2, Texas.

RADIOLOGICAL SOCIETY OF NORTH AMERICA. Thirty-sixth annual meeting will be held in Chicago, Palmer House, December 10-15, 1950.

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This handy booklet for new mothers was "built to doctors' orders". It contains blank forms for filling in your instructions and formulas.

It provides a permanent case-history record. A memo will bring you a sample...or as many as you want for your daily practice... without obligation.

Many doctors are prescribing "Daricraft Homogenized Evaporated Milk". It is always uniform, safe, sterilized, easy to digest, and high in food value and minerals. Daricraft contains 400 U. S. P. units of Vitamin D per pint.



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BOOK REVIEWS

MEDICAL DIAGNOSIS, APPLIED PHYSICAL DIAGNOSIS. Edited by Roseoe L. Pullen, M.D., F.A.C.P. Second Edition, Philadelphia, W. B. Saunders Company, 1950.

The Department of Medicine in medical schools is responsible for the teaching of physical diagnosis, consequently this subject is customarily taught and written about by internists. This has led to emphasis on fields familiar to the internist, such as heart and lungs, and comparative neglect in fields unfamiliar to him, such as urologic and gynecologic examination and diagnosis. Doctor Pullen has overcome this defect, apparent in many books on physical diagnosis, by a regional method of presentation, with the examination of each region, or organ, being discussed by a specialist in that field. Thus, the examination of the eyes, pelvis, and anus are discussed by an ophthalmologist, gynecologist and proctologist, respectively.

The first two chapters deal with the general medical history and examination of the patient; the remaining 22 chapters are concerned with the detailed examination of the regions and organs of the body. X-ray diagnosis is discussed as it is applied to the various organ systems. Chapter XI (76 pages) is devoted to electrocardiographic diagnosis alone. Special chapters are devoted to examination of the child and to psychiatric examination.

The second edition contains 1119 pages, 601 illustrations, and 48 colored plates; as compared with 1106 pages, 584 illustrations and 12 colored plates in the first edition. The number of contributors has been reduced from 27 to 23. The sections on examination of the abdomen and electrocardiographic diagnosis have been completely rewritten. New chapters on bedside diagnosis of blood diseases, medical diagnosis in the aged, and the examination of the psychiatric patient have been added.

This book represents a sincere effort to neglect no phase of physical and specialty diagnosis. It is one of the best and most complete works on this subject available.—R. M. Shepard, Jr., M.D.

THE MERCK MANUAL. Eighth Edition. June 1, 1950. 1600 pages.

Approximately 1,600 pages in length, the new edition contains 338 chapters in Part I on the diagnosis and treatment of diseases (82 more chapters than in the preceding edition).

New or expanded chapters include those on nutritional deficiencies, radiation reactions and injuries (including those due to atomic bombs), allergies and antihistamines, psycho neuroses, drug addiction, dental emergencies the physician may have to treat, prenatal and postnatal care, and the care of premature infants.

More than 1,175 prescriptions are included, conveniently arranged in categories according to therapeutic action.

In Part II will be found new chapters on routine immunization measures, clinical and bedside procedures, laboratory tests practicable for the physician's office, suggested items for the physician's bag, and outline of preoperative and postoperative care, a section on diets, and helpful ready reference data and conversion tables.

Details of treatment with streptomycin, penicillin and other new drugs are presented in the chapter on Antibiotic Therapy, which includes a convenient table outlining the "Recommended Chemotherapy in More Common Infection." Many similar tables for ready reference on other subjects appear throughout the book.

Treatment with crystalline Vitamin B₁₂, the pure anti-anemia factor that was first isolated and made available 1948-49 is covered in the chapters on megaloblastic anemia and sprue.

The latest available information at printing time on Cortisone and ACTH is given in the chapter on Adrenocortical and Related Therapy. In addition to descriptions of their metabolic, hormonal and other physiologic effects, clinical results to date are cited for many diseases.

This manual is pocket size, and especially valuable to interns, residents, and general practitioners.

— Everett B. Neff, M.D.

PLASTIC AND RECONSTRUCTIVE SURGERY. Ferris Smith, M.D., F.A.C.S. Philadelphia. W. B. Saunders Company, 1950.

This recently published book was read with interest and enjoyment. The author has compiled an extremely informative volume, covering the subjects well. The style of presentation is simple and straightforward. The book is profusely illustrated with photographs and diagrams. This work could be read by anyone with profit, but it will find its greatest use as a reference book, in every hospital, nursing school and medical school library. Likewise it would be useful as a text in instructional work.—John F. Burton, M.D.

PRACTICAL GYNECOLOGY. Walter J. Reich, M.D. and Mitchell J. Nechtow, M.D. Chicago. J. B. Lippincott Company, 1950.

This excellent book is not only practical but informative in a simple, clear and concise manner. It includes 426 pages, 132 illustrations, and 15 plates of colored photographs that are unusually good.

More and more, "office gynecology" is being stressed in teaching clinics and in the literature. This book adheres to this policy, and is ideal for quick reference.

The manner in which psychosomatic medicine, its importance, and its relationship to gynecology, is clearly presented. It handles female endocrinology in the "easy to understand" style.

Emphasis is placed on early cancer detection, and the office techniques for such procedures are demonstrated and illustrated in a most satisfactory way.

A few other unusually excellent chapters are: Inflammatory Lesions, Infections, Disturbances in Menstrual Function, Low Fertility and Sterility, and Neoplasms.

This volume should be included in the library of not only every gynecologist, but every general practitioner.

—LeRoy H. Sadler, M.D.



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MEDICAL ABSTRACTS

ANTIDIURETIC ACTION OF THE URINE OF PATIENTS IN CARDIAC FAILURE. Bercu, B. A., Rokaw, S. N., Massie, E. Dept. Int. Med., Washington Univ. School Med., St. Louis. *Circulation* 2:409, Sept. 1950.

When a concentrated dialyzed fraction of urine from patients with congestive heart failure was given intravenously to hydrated dogs, a distinct antidiuretic effect was noted. No such effect was found after control injection of similar urine concentrates from normal patients.—Robert M. Becker, M.D.

BLOOD LIPIDS AND HUMAN ATHEROSCLEROSIS. Gofman, J. W., Jones, H. B., Lindgren, F. T., Lyon, T. P., Elliot, H. A., Strisower, B. Donner Laboratory, Univ. of Calif., Berkeley, Calif. *Circulation* 2:161, August, 1950.

Using the ultra centrifugal flotation method of separating the various cholesterol-lipid-protein molecule complexes present in human serum, Gofman and his co-workers found a group of cholesterol-bearing lipid and lipoproteins consistently associated quantitatively with clinical atherosclerosis in patients and in cholesterol fed rabbits with atherosclerosis. There was no consistent relationship between these apparently etiologically important lipoprotein complexes and total serum cholesterol or cholesterol ester values. Evidence was also found that after ordinary low fat low cholesterol dietary management, there was a significant decrease in amounts of these atherosclerotic inducing lipoprotein complexes. Since these molecules were found to be present in greater concentrations in the serum of patients with atherosclerotic vascular involvement like coronary artery disease, hypertension, diabetes mellitus, hypothyroidism and nephrotic syndrome, diets low in cholesterol and fat would be distinctly indicated in these conditions.

—Robert M. Becker, M.D.

CARDIAC DISEASE AND RHEUMATOID ARTHRITIS. Bradfield, J. Y., and Hejtmancik, M. R., Medical Branch, Univ. Texas Hosp., Galveston, Texas. *Arch.*

Int. Med. 86:1, July, 1950.

In a careful clinical study of younger persons with rheumatoid arthritis, the authors found about one of every two or three patients had evidence of organic heart disease. Their clinical study was found to correlate well with necropsy reports in the literature which cite about the same incidence of pancardiac lesions structurally indistinguishable from those associated with rheumatic fever, in patients with rheumatoid arthritis. The authors feel this is strong evidence that rheumatoid arthritis and rheumatic fever "are differing manifestations of one fundamental morbid process, which is very likely allergic in character." They point out that patients with "rheumatoid heart disease" generally tolerate the cardiac lesions well owing largely to the limitations of activity their joint difficulties impose upon them.—Robert M. Becker, M.D.

SALT RETENTION IN CIRRHOSIS OF THE LIVER.

Goodyer, A. N., Relman, A. S., Lawrason, F. D., and Epstein, F. H. Dept. Int. Med., Yale Univ. School of Med., New Haven, Conn. *Jour. Clin. Invest.* 29:973, Aug. 1950.

Patients without liver disease, patients with cirrhosis of the liver without edema or ascites, and patients with cirrhosis of the liver with edema and ascites were given intravenous infusions of normal saline under well controlled conditions. Renal plasma flow and clearance studies were made, along with quantitative studies of serum and urinary concentrations of sodium. It was found that the cirrhotic patients with edema and ascites retained Na by mechanisms of increased renal tubular absorption of Na. No Na retention was noted in the patients who were free of liver disease, nor was it observed in those cirrhotics who had no edema or ascites. The stimulus for increased tubular absorption of Na remains obscure, but the implications of this study, indicating sharp Na restriction and use of Hg diuretics in cirrhotics with edema and ascites, are clear.

—Robert M. Becker, M.D.

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1. *Withering, W.*: An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.*: Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. 209: 33-41 (Jan.) 1945.

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OBITUARIES

L. A. MITCHELL, M.D.

1881-1950

L. A. Mitchell, M.D., pioneer Stillwater physician and civic leader died September 14 in a Stillwater hospital following a short illness.

An Oklahoma State Medical Association Councilor for many years, he was a past president of the Oklahoma Tuberculosis Association, a past president and secretary of the Payne County Medical Society, past president of the Stillwater Lions Club and the Stillwater Chamber of Commerce. Listed in Who's Who in Oklahoma, Doctor Mitchell was also a 32nd degree Mason, being a member of the Blue Lodge, Scottish Rite Consistory of Guthrie and was a member of the Shrine. He was a member of Sigma Nu Sigma fraternity. He was a member of the American Legion, having served in World War I as a first lieutenant.

Doctor Mitchell was born May 20, 1881 in Haileyville, Alabama. He attended Peabody College and the University of Nashville Medical School. He interned at St. Mary's Hospital at Hoboken, New Jersey and served one year in the United Fruit company hospital at Bocas del Tora, Panama, returning from there to practice medicine at Frederick, Oklahoma in 1910. Doctor Mitchell moved to Stillwater in 1925 and served as A. and M. College physician for three years before establishing a private practice there in 1938. He was a member of the First Christian Church serving as life elder and chairman of the official church board.

Survivors are his widow of the home, a son, Max Allen Mitchell, music director at A. and M.; a daughter, Mrs. Robert L. King of Austin, Texas; four grandchildren and a sister.

H. H. FAUST, M.D.

1916-1950

H. H. Faust, M.D., former Vinita physician, died following injuries received in a plane crash near Newberg, Ore. August 22. Doctor Faust left Vinita in 1945 and had lived in Corvallis, Ore. since that time. He was born April 30, 1916 and was graduated from the University of Oklahoma School of Medicine in 1940.

J. A. MUNN, M.D.

1882-1950

J. A. Munn, M.D., a resident of McAlester for the past 30 years, died suddenly August 27 in McAlester.

Doctor Munn was born in Conway, Arkansas, January 21, 1882. In 1907 he came to Wilburton and settled in McAlester in 1920.

Active in medical organizations, Doctor Munn also was a member of Elks lodge, Masons, American Legion and other civic organizations.

JOHN V. CLARK, M.D.

1914-1950

John V. Clark, M.D., Oklahoma City, died September 20, 1950 in an Oklahoma City Hospital.

A World War II veteran, Doctor Clark served with the United States medical corps on Guam for one year.

Doctor Clark was graduated from the University of Oklahoma School of Medicine in 1938 and served his internship at St. Luke Hospital, San Francisco, Calif. He was a member of the Presbyterian church. Doctor Clark came to Oklahoma City about 12 years ago from Roff, his birthplace.

Survivors include his widow of the home, his father, Ralph Clark, McAlester, a brother, Ralph O. Clark, M.D., Oklahoma City; and a sister, Mrs. Edgar A. deMuelles, Corvallis, Oregon.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE CHRISTMAS SEAL

At this writing the editor is in the New York office where the N.T.A. Christmas Seal has a national voice. In an adjoining room the budget committee is striving to set up plans for the economic administration of this great voluntary agency which with the loyal support of its many affiliated state and local organizations has helped to bring about the phenomenal reduction in the tuberculosis death rate and has become a pattern for many less fortunate countries throughout the world.

Though only a small per cent of the money invested in Christmas Seals goes to the National Tuberculosis Association, it is good to know that it is well spent and that its influence travels 'round the world.

Forty-six years of accomplishment and accumulated experience justify the methods which have been employed by these interlocking organizations, national, state and local. The continued decline in the death rate indicating successful measures of control should reassure everyone who invests in the seals.

Tuberculosis is a treacherous disease and as long as there is a single case at large it is not safe to rest on our oars.

It is well for doctors to know that a large sum of the N.T.A.'s Seal Sale fund is spent annually through its own Research Foundation under the direction of Dr. Esmond R. Long who is eminently qualified for this important position.

When the Christmas Seal Sale opens make your purchases promptly and send the little missiles on their mission of mercy.

STANDARDIZATION OF HOSPITALS BY HOSPITALS

In the November issue of the Journal there is a brief editorial referring to the recent agitation about hospitals engaging in the practice of medicine and fixing and collecting certain professional fees. Now it becomes necessary to call attention to the fact that the American College of Surgeons may discontinue the Hospital Standardization service so well conducted for a quarter of a century and that the American Hospital Association is planning to take over the hos-

pital standardization program. Apparently this decision was reached and embodied in a resolution without conferring with the American Medical Association although the latter has participated in the standardization programs for many years.

Since hospitals originally were planned to facilitate the medical care of patients and would be of no use to anybody without patients and physicians and since patients look to the physicians for care rather than the hospitals, is it not presumptuous for hospitals to set up their own standards even though they plan to give physicians a minority representation on their boards? And since internships, already a glut on the market, must be filled by doctors and since the nursing training is largely dependent upon the medical profession, is it not even more presumptuous to embody in their resolution the thought of inviting "... interested organizations of the medical profession to cooperate in the development of standards relating to the practice of medicine in hospitals"? How generous of hospitals to think of giving the physicians a chance, not to determine the standards of medical practice, but to cooperate in the development of such standards. Even other professional organizations concerned with the problems of hospital standards are invited to cooperate. Who can guess what the standards of practice may ultimately be if physicians only cooperate rather than formulate? In a sense such a program might ultimately lead to regimentation similar to that sought by Oscar Ewing and Mr. Truman though less universal.

In the last analysis hospitals are dependent upon physicians for support. As a rule patients go to hospitals or remain at home according to the doctor's advice.

In the opinion of many good physicians, hospitalization has been overdone. Many patients who now go to hospitals can be well cared for in the home with family care, with nurses aids or if need be, with registered nurses. If necessary, the home nursing program can be accelerated. Such home care and home nursing is in keeping with the present emphasis of medical schools on the need of more general practitioners.

The precipitate resolution providing self inspection and standardization may prove to be much harder on hospitals than its sponsors ever dreamed and may result in penalties hard to pay.

Hospitals without physicians and patients would be as cold as furnaces without fuel, and as dead as internal combustion engines without gasoline.

Perhaps the American Hospital Association should reconsider that resolution and consult organized medicine about the question of medical practice in hospitals.

THE HEALTH RESOURCES ADVISORY COMMITTEE OF THE NATIONAL SECURITY RESOURCES BOARD

In the September 30, 1950 *American Medical Association Journal* this committee is considered editorially. Judging from the editorial comment this committee though acting in an advisory capacity has a great responsibility in that its duties include the function of making recommendations to agencies endowed with power to act. Through the National Security Resources Board and the Civil Defense Office this committee's recommendations may become activated with sufficient power and authority to materially upset civilian medical care in any community at any time unless adequate safeguards are provided. This is not apt to occur except in the event a great national emergency arises, but in the past the American people have occasionally experienced painful surprises through the exercise of powers they did not know were in existence. The time has come when the A.M.A. must keep a finger on the national pulse and as members of this organization, we must be vigilant.

POLITICS AND MEDICINE

In the *Saturday Evening Post* of October 14 Sam Stavisky in an article entitled "Are Politicians Ruining the Veterans' Hospitals" shows how medical standards in the one time miserably managed V.A. Hospitals have been improved in the past five years and how they are being threatened by present political policies, political expediency, pork barrel measures and uninformed pressure groups.

The writer having been on two national committees to try to get better care for veterans suffering from tuberculosis, knows how miserably mismanaged some of the facilities were before Generals Bradley and Hawley took charge.

A long sad story could be told. But our present problem is so acute our efforts should be exerted in support of Doctor Paul Magnuson, who has the knowledge and the courage to hold fast to the sound principles now in force and to bring about further improvement if not totally hamstrung by the ignorance, indifference and designs of thoughtless and unscrupulous politicians.

Space will not permit an adequate account of the problems involved, suffice it to say that every physician should read this article and write his representatives in behalf of the disabled veterans, the doctors who are earnestly trying to do a good job and for national economy and common decency.

What a revealing story this is and yet how little of the mismanagement can be told in one short article. But here is enough to convince any thinking person that compulsory health insurance with all the domination and uncertainty of bureaucracy would ruin medicine and wreck the government.

DR. HENRY A. CHRISTIAN DISCUSSES UNDESIRABLE TRENDS

Every physician, young and old, connected in any way with the problems of medical education should read Dr. Henry A. Christian's timely address before the thirty-first annual session of the College of Physicians entitled "Present Day Undesirable Trends in the Training of Physicians and of Teachers of Internal Medicine".¹ Doctor Christian's masterly discussion of the interplay between the well instructed enthusiasm of the "younger generation of medical folk" and the seasoned councils of the old "builded on their experiences in teaching and training young men" should bear valuable fruit. The equable integration of youthful enthusiasm and elderly wisdom in the field of medical training is imperative if sound clinicians and teachers are to be produced. Doctor Christian believes that too much emphasis is placed on "investigation as the most important factor in the training of those who are to become in later life physicians and teachers". Significantly he believes that both physicians and teachers need the same type of early training.

Through a comprehensive survey of organizations of resident staffs, informal conferences with many of the young men in training and the application of his own knowledge and experience the conclusions reached and the recommendations suggested merit serious consideration by all who are engaged in the significant task of training

the forthcoming generation of physicians and teachers.

This brief editorial comment on Dr. Christian's intriguing and highly informative pronouncement on a very important phase of medical education is presented with the hope that it may stimulate a wider perusal of the address and the crystallization of concerted action in favor of sounder practices in this field of medical endeavor.

Finally for the benefit of those who may not read the address, it should be known that the author closes with emphasis upon the fact that even in a training program "the interest of the patient always comes first" and quotes his own teacher, William Osler, the master clinician:

"In the natural method of teaching, the student" (and this applies also to intern and resident) "begins with the patient, continues with the patient and ends his studies with the patient using books and lectures as tools as means to an end. . . The art of the practice of medicine is to be learned only by experience; 'tis not an inheritance; it can not be revealed. . . Medicine is learned by the bedside and not in the class room. . . Live in the wards. Do not waste the hours of daylight (on that) which you may read by night. . . To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all. . . I fear lest the broad open spirit . . . should narrow as student and teacher chase each other down the fascinating road of research, forgetful of those wider interests to which a great hospital must minister."

In behalf of humanity and the preservation of a great profession these principles must prevail.

1. *Annals Int. Med.* Vol. 3, No. 3, Sept. 1950.

ATOMIC ATTACK AND CIVIL DEFENSE

Apparently with few exceptions Oklahoma physicians manifested very little interest in the recent intensive educational program provided at the Medical School for both the profession and the public. Whose business is this matter of protection against the atomic bomb? Whether or not Oklahoma is attacked the educational process of making ready is quite worthwhile. The devastating effects are so grave and so far reaching territorially as well as biologically, no community can afford to go without the available protective knowledge.

To whom must the people look for leadership, the medical profession or some non medical group? Naturally the people will

expect the members of the medical profession to provide most of the knowledge upon which plans for protection are to depend and they will be disappointed if they fail.

If the truth were known the average doctor in Oklahoma is no better prepared to care for victims of atomic bombs than were the physicians of Florence prepared to take care of the plague when it struck with such devastating effects 600 years ago and prompted Boccaccio to make this tragic report:

"How many memorable families, how many ample heritages, how many famous fortunes were seen to remain without lawful heir. How many valiant men, how many fair ladies, how many sprightly youths, whom, not others only but Galen, Hippocrates or Esculapius themselves, would have judged most hale, breakfasted in the morning with their kinsfolk, comrades and friends and that same night supped with their ancestors in the other world."

Though we are in the center of the United States far removed from the probability of initial attack, we are not immune. We have the oil and gas necessary to keep Mars on the move.

Though some day a greedy Boccaccio may record our griefs, Oklahoma doctors must make sure the record contains no account of their shortcomings.

Procrastination may defeat the best of good purposes. The writer has always sympathized with Rip Van Winkle, time slipped by while he slept. When doctors fail to keep up with progress they are not merely inept, they are inert.

WORK IS GOOD MEDICINE

To paraphrase Rockefeller, most men are miserable because nothing can make a fool happy. There is no genuine panacea but honest labor is the best remedy. The sweat of one's brow breaks the back of psychological pains, serves as a source of sustenance, and makes the poor happy. Idleness is a violent evil. It usurps power, overrides interests, blunts perception and becomes the hidden rock upon which the bark of life is broken.

It is a well recognized fact that those who have had to work to pay for medical care are more appreciative and more responsive to treatment than those to whom it comes as a gift from the government. The politicians of today so industriously engaged in the encouragement of idleness, if uninterrupted, will destroy the state, and we hope they will repent the deed and pay for their sins.

SCIENTIFIC ARTICLES

CHARACTER - ITS FORMATION AND MODIFICATION*

KENNETH E. APPEL, M.D.

AND

MITCHELL L. DRATMAN, M.D.

PHILADELPHIA, PENNSYLVANIA

Character and personality have many determinants. In the course of life, people develop forms of reaction, feelings and attitudes which become habitual. These, in their totality, are spoken of as character or personality. How much is the contribution of heredity or endowment, how much training and environmental influences, is a matter of debate. There is much obscure and wishful thinking in these matters. It is of great importance to attempt to clarify our thinking when the behavior is anti-social or socially disapproved, as for example in delinquency or homosexuality.

If conduct is viewed as a matter of heredity and genetics, treatment of patients with socially disapproved behavior will be pessimistic and often punitive. If it is viewed as developmental or conditioned, treatment will be perhaps optimistic, experimental, challenging. If behavior is viewed from the developmental point of view, efforts can be made to alter the reaction by guided, constructive experience which is called psychotherapy. The careful study of persons attracted predominantly to the same sex offers opportunity to study factors contributing to this form of behavior.

Homosexuality is most common in late adolescence and early adulthood, where it is often a passing phase or form of sexual experimentation. Many pass on later to heterosexual adjustments without any particular psychological trauma. If later in life heterosexuality is not possible, homosexuality may be resumed. Kinsey reports that between 25 and 30 per cent of American males have had homosexual contacts. His studies show also that it is commonest in those who have stopped schooling early. It is least common in the college group. The frequencies, he reports, are like those of premarital and extramarital intercourse, inversely proportional to good economic status.

Many factors have been held to be responsible for homosexuality. Heredity, constitution, parental overprotection in child-

hood, sexual trauma in adolescence, endocrine imbalance, seduction, illness, fixation in adolescence. Sigmund Freud defined the psychology of homosexuality. Perloff, in his study on the role of hormones, in human sexuality, concludes that genetic factors exert no influence on the choice of the sexual object. The same applies to the injection of hormones. He believes that abnormalities are due to psychological factors. Psychological factors determine the choice of the sex object. Castrated human beings show sexual behavior similar to intact humans. Therefore, sex hormones are not indispensable. The endocrine systems of homosexuals show no constant significant variations. The administration of estrogen to normal males decreases the libido but does not increase the attraction for other males. The administration of androgen to normal women may increase the libido but not cause them to assume the male sexual role. Perloff concluded that homosexuality is a purely psychological phenomena and does not depend on a hormonal pattern for its production nor amenable to endocrine treatment for change.¹

The following case has been studied intensively by my associate, Dr. Mitchell Dratman. It shows the importance of experience and parental attitudes in the development of a feminine orientation on the part of a child and the method of therapy used to modify these characteristics.

The boy we are presenting is a 15 year old high school student who is not an overt homosexual but who illustrates many of the mechanisms that go to make up homosexuality. The Mother and Father figures are characteristic of what might be found in any overt homosexual. His character is immature, passively dependent, yet aggressive and petulant, a boy who wants things done for him and wants his life worked out for him. These are attributes found in the personality of homosexuals.

The patient, whom we shall call George, was referred by the Reverend of his Church, who is a very intuitive and understanding person, who felt George was effeminate and

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association June 6, 1950.

in need of help. The first interview with the Mother was taken by Miss Margaret Heyman, who is our psychiatric social worker. The Mother complains that the patient has always been "on the sissy side", plays only with younger children, and indulges in no boys' sports. For the past three years the boy comes home after school and prefers to read comics or listen to the radio rather than play with other children. Before, he was obedient and courteous but in the past few months has been rebellious and has been careless in his manners. The Mother wants to know if this is normal adolescent behavior or something more serious.

George's chief complaints were "I'm shy. I won't go out and play with other boys. I'm not interested in sports and I desperately want a television set."

The social worker's developmental history briefly summarized is as follows:

The patient was born in 1933. The pregnancy was uneventful until toward the end when the Mother had a kidney involvement, necessitating a Caesarian section, after which she had convulsions and was hospitalized three weeks. The patient weighed 9 lbs. 11 oz. He was a good baby, hardly ever crying. He was successfully fed with the bottle. He had a T and A at one year of age, had intermittent croup for the first six months and has always been susceptible to colds. He had no serious illness except in 1942 when he had mumps. The Mother reports his toilet training was easy. Bowel training started at one and one-half years; he was dry at two and clean at two and one-half years of age.

The Mother describes the patient as an unaggressive child, who let others push him around, never standing up for his rights. He has always been fussy in his dressing, in his copy work at school, and in his care of toys. He loves to draw and paint and is quite artistic. He likes to put on shows for children and do magician's tricks.

Concerning sex education, the patient never asks questions, but three years ago, when the Mother was pregnant, she tried to tell him about sex. She gave him a book. When he saw the pictures of the fetus, he refused to look further and continues to refuse to look at the book, although the Mother asks him to do so.

The patient started kindergarten at age five. Throughout his life until age 11 he lived with his family in the household of the maternal grandmother. The Mother de-

scribes the Father as a passive, unaggressive individual. He is the third of five children, preceded by two brothers and followed by two sisters. His parents did not get along; he was very close to his Mother. The paternal grandfather was very strict; none of the children could ever talk back and the Father had to say "sir" to the paternal grandfather, who demanded immediate obedience. The Father and paternal grandfather argue today, as do the patient and his Father. The social worker's description of the Father sketches him as a thin, pale, effeminate looking man, lacking aggressiveness, who seemed extremely uncertain and passive, who felt there was nothing wrong with the patient but that really he knew nothing about him. When specifically questioned, he admitted he noticed George had feminine ways and wasn't interested in sports or other adolescent activities.

The Mother, age 38, is described by the social worker as a woman with an air of decision about her, that is, an aggressive, controlling individual. In giving the information she was at pains to establish that she was in the right. The Mother was one of six children, the third girl, followed by a boy two years later. The Mother describes herself as a tomboy, who played football and baseball, was on the hockey team, and did all the things athletically which the patient does not do. She never played with dolls. She was not an accomplished student but finished high school. She prides herself in being her Father's pet, to whom she felt very close while he was alive.

When George's parents were married, the Father was not working steadily. For some time afterwards, they lived in the maternal grandmother's home, who the Mother says "practically kept us". It was not until the war years that the Father "got on his feet" and they got their own home only at the Mother's insistence. The Mother had considerable difficulty in discussing her sexual adjustment and said she never mentioned this to anyone including her own husband. She states she lost all interest in sex and that Father has not been very considerate and insists on intercourse. On account of this, the Mother has thought about leaving Father, although she never discussed it with him. This was one reason why she "let him enlist."

Father is a professional photographer who has a studio in the basement of their home. He earns around \$85 a week. There is an-

other child, a girl, age two.

Even before we start describing the case and the patient, we see a very aggressive, domineering Mother married to a passive, dependent man, who was content to live in the maternal grandmother's home. It seems that the patient, George, had the dice loaded against him from the very beginning and had to overcome tremendous odds just to achieve normalcy.

The early interviews will be given consecutively to allow the case to be followed as it unfolded to the psychiatrist. At the time of the first interview the patient was assured our sessions would be private and none would know of them, certainly not his Mother or his Father, and that we could talk or play games as he desired. After the second interview most of the material was obtained by the method of free association; the patient was asked to say whatever came to his mind, that is, to bring forth his thoughts without changing or criticizing them. He was instructed not to hold back thoughts that might seem not nice or silly or shocking.

George is a rather lanky, gangling, easily flustered young boy. He is effeminate in gesture and mode of speaking. His clothes are in keeping with his gestures and appearance. For example, the first time he wore a purple shirt, mauve tie and socks. Later he blossomed into flowered, flowing polo shirts, meticulously and over-neatly worn.

In the first interview he stated it was "Mother's idea to come here, not mine. I am in my sophomore year in high school, and my grades are not too good. I just don't study. I never liked gym and take hygiene instead." He volunteered "I like Mother much better than Father because Father is always getting mad and argues. He likes me to be particular about money. I'm never relaxed when he's around. He's always getting mad. He says 'You're not too big to be spanked' although he never spanked me." The patient is interested in radio, movies, television, enjoys reading comics. "I don't like to read, therefore I enjoy the comics." George emphasized his current interest in and need to own a television set. The patient remarked he had occasional nightmares. At the end of the interview he expressed a desire to come back.

In the third interview, he remarked "I have something to tell you. I think I know what the matter is. It's my physical condition. (much feeling was expressed). My

physical condition is not too good. I don't play games. I don't like gym. The other boys look healthy. I don't. (At this point the patient wept.) I guess that's all there is to say. I'm bashful and shy, and the only way to be cured is to exercise and forget about the whole thing. Please don't tell my parents." (He was reminded of the earlier promise I had made to him.)

"I realize my physical condition means more as I grow older, but I don't care to discuss this further today, except that I like to have nice clothing. It makes me feel better, less conspicuous and people like me better." (It was pointed out that he was using clothing to hide some of his feelings.)

In the next interview the patient talked of his desire to obtain a television set. From now on he referred to his Mother as "she". The patient rented a television set with his own money but it had to be returned at the end of a month. There was much arguing at home about the television set. He stated he desired the set because of the entertainment value. Also because "I never can find anything to do." Beside which "I told my parents I'm going to be a bachelor." He continued, "It's the first thing I ever wanted. They ought to get it for me. I don't like life much anyway, and this is the one thing I want." We discussed the reality factors, how much it would cost, how much the family could afford, and the possibilities of his earning some of the money himself. His Mother had now acceded to his wishes and thought it would be all right, but the Father was adamant and said "no".

In the sixth interview, the patient reported he could get sleeping pills in a drug store. "I just can't sleep, and maybe I need them." (The patient was perhaps toying with the idea of suicide as a gesture and a threat to his parents.) He spoke of his Mother in a rather disparaging way. "She always tells me what to do. I am doing poorly in school." He was feeling sick to his stomach, which necessitated his staying home for a few days and generally felt irritable and miserable. He also related that his bedroom wall was covered with pictures of television sets.

In the next interview he came in fighting mad, still talking about the television set. "Mother says 'When you start being different and real nice the next day you can have a television set.'" George felt he would do just what she wanted in order to get a television set. "I'm not getting what I want by fighting, therefore I'll give in." He was told he was being passive and good and was

giving in just to get what he wanted. This was really his main problem, not the television set.

In the eighth interview, George came in saying "This might be my last visit. Mother goes to the woman here (psychiatric social worker) and she asked her if I should have a television set and the woman doesn't answer. I ask you and get no answer. You say 'We have to work it out'. Mother says to ask you, and if you say O. K. I can get one. I want Mother or you to decide and to straighten me out." (why not yourself) "I don't want to be different from the way I am. I wouldn't care if I stayed this way the rest of my life. I'm here. That's that. All I want is a television set." (We attempted to discuss his passive attitude.)

In the next interview George came in and said "I want Mother to come here to you and have you say 'yes' to my getting a television set." (What would she ask in return) "To be good and everything else she wants, me to be different, not glum. I really wouldn't change, but I'd keep coming here. The only reason I come here is because she makes me. Personally, I don't think you worry about your patients or lose sleep over them."

In the tenth interview the patient told me he had decided to run away the previous day. He had saved \$20, packed his suitcase and was on his way. He made much noise while he was leaving the house. His Mother was away, his sister was sleeping and Father was working in the basement. He planned to go to the seashore and expose himself to the police who would be searching for him by this time. He judged it would take two or three days to be caught. His money would last just that length of time. He would be brought back and would get what he wanted, a television set. However, when he got to the corner, his Father came out and brought him back. "I told him what I was going to do, and he said I couldn't do it, so I went back to the house and went to bed. If they give me a television set, all right. If not, I'll do it again only this time I'll succeed."

The Reverend who had referred the case discussed it again. At this time he volunteered to speak to the boy's Father in an effort to promote a closer relationship between Father and son.

In the next interview George came in saying he felt wonderful. "Dad took me in his car to the country. We talked for a long time. Dad told me he had been poor and had to watch his pennies, and still did. He said

that I expected too much of everything. My stomach was upset, and it was shaking by the time I returned, but after awhile, I felt better. Mother said I would get a television set if I stayed the way I was." The patient then told me he thought the minister had spoken to his Father. I agreed that he did. "Pa never spoke like this before. He used to say 'Be quiet' or 'go to your room' or 'you're not grown-up yet.'" Then paradoxically, the boy said "I think I'd like to change my religion." (This seemed to show how at the same time the boy wanted yet feared to be brought close to his Father.)

In the next interview George came in stating he was again angry at his family. "What good is it to be good; good or bad, it's the same thing. They keep saying they saw a set and they decided to get this one or that one." "I told my Mother that a boy friend of mine can get sleeping pills, and maybe I want them. Don't be surprised if I don't wake up some morning." (Again the threat of suicide to achieve his end.)

The thirteenth interview brought a happy George, who now had his television set. It seemed that now we could get down to more understanding of his basic problems.

George spoke of going to his Grandmother's and how it reminded him of the happy times when he lived there. "We lived in a detached home. Now I live in a row house." George's family spoke of his getting a job for the summer. (We talked of the possibility.) George said he wanted a job away from people, perhaps a stock boy behind the counters or answering the telephone in an office where nobody else would appear — some sort of a job where he would be alone and wouldn't have to face people. He also stated, "I argue with my Father all the time." "Father says it's all my fault, but he says things as if he's always right, and he makes me feel like a dumbbell."

At this point, the results of psychological testing were received and the following is an interpretation given by the psychologist.

"The patient is presently functioning at a superior level of intelligence with a total I. Q. of 123. He manifested self-depreciation during the test session. He has capacity to do good academic work. He frequently stated "I'm not good at this, or "I know I'm dumb in this part." However, when encouraged, he was able to complete the test perfectly. Aside from these self-depreciatory remarks, his behavior was that of a normal adolescent boy."

Simultaneously with the psychiatric interviews, the parental situation was being worked through by the social worker. Her report is as follows:

The Mother was seen a total of 14 times, and the Father was seen on two occasions. The Mother is a hostile, aggressive woman, and the Father a hostile, passive person. The Mother seemed tied in the marriage because of her large masochistic component, that is, her desire to enjoy the suffering of her marriage.

The case work treatment with the Mother consisted of interpreting the psychiatric treatment to her and giving her the feeling of being a part of it. She was supported through the patient's pounding at her concerning television and was encouraged throughout to keep the patient in treatment. Interpretation given her helped to prevent interference with the doctor's sessions and her questioning the patient concerning treatment. Although television was given by the patient as the basis for his difficulty, the Mother was able to see it more realistically as a symbol of her struggle with the patient for control. Along this line she was able to see the various areas of her interference with the patient's independence. She intellectually got hold of the idea that she was interfering in these various ways and was making a conscious effort to control herself. The Mother felt she had gotten a good deal of understanding concerning her relations with the patient but did not wish to go deeper into her relationship with the Father because this was too threatening for her. She projected blame for the situation upon the Father, whom she saw as the core of the patient's problem and wanted the worker to force him to cooperate. It seemed that since the Mother actually had no way of retaliating against the Father — even talking back to him was of no use, she was attempting to control him through the social worker.

In the next interview, we again talked of the many things that troubled George; of a job, his attitude of living in a row house and his rationalization that he couldn't have his friends over because of the row house. We spoke of jealousy toward his two year old sibling. "They think of her as a baby and enjoy when she talks cute, especially Pa. A child ought to go to its Mother and not its Father. I don't like it. I'm mad or jealous when she calls him. I want her to call me George. I don't want her to give all her attention to Father." (We discussed his jealousy toward his two year old sister.)

"She should go to me the way she goes to Mother." (We brought up the question of his being like Mother.) At this point he again talked of changing his religion.

The fifteenth interview was spent talking about a job. It was apparent he wanted me to suggest the sort of work that he might do and where he might obtain it. We attempted to work this thing out with him, and to show him that his real problems were his dependent needs and not whether he got a job. The next interview brought the news of a job with his uncle, answering the telephone. This suited the patient because it was in a small office away from people, and he would be there all alone. This was the last interview before the summer vacation. He was told if he wanted to continue psychotherapy in the fall, he would have to call me for an interview when he returned. He would have to do it himself, not his Mother or his Father, but he alone.

The appointment for the seventeenth interview was made by the patient himself. George said he felt mentally much better over the summer but now that school was starting he was nervous and felt some of his old complaints were returning. The next interview brought some interesting material. At school he was taking an automobile driving course, and he said "I feel half scared to death". We worked through some of this material. Actually, he was half scared of what he might do, half scared of taking the bull by the horns, in this case the car by the wheel, because he could never tell what it might do. The car was a powerful thing, and he was operating it. It was something aggressive and because it was really he who was driving the car, he was afraid of what he might do. In short, he was afraid of his own aggressions, afraid of being a boy for fear of what he might do as a boy, as an aggressive, masculine boy.

In our next interview he told me his Mother was pregnant. We attempted a discussion of this subject. He didn't like the idea of having a brother or a sister. It would drain the family's finances. There would be less for him and less freedom. Another interesting sidelight was his alleged complete ignorance of anything sexual. The twentieth interview showed the beginning of some independence. He had secured a schedule for the bus that brought him to the hospital, independently of anyone else, and although this was a small effort, it was nevertheless an independent one. Also, he played football for the first time in his life. Actual-

ly it wasn't really football. He was encouraged by his cousin to throw a ball around, and while they were doing this, two other boys came upon the scene, and he was forced to throw and kick a ball. "It wasn't really as bad as I expected it to be."

The next interview brought the following, "I expected to come here to have everything done for me. I feel my difficulty is that I look unhealthy and thin. My build is not up to the rest." (A great deal of feeling was expressed in this.) "I read a book and the man in the book was thin, and people felt he was sick, and he was funny looking, and they laughed at him, and people have the same impression of me. When I'm dressed, it's all right. When I'm undressed, I feel like the man in the book. The man was withdrawn and liked to be alone, like me. In school the kids say 'stuff, fairy, nature boy, fruit'. It used to annoy me very much. Not so much now." He had no idea what these terms meant. This was worked through and he finally arrived at the conception that these meant that he was somewhat like a girl.

In the following interview, he continued the material of this last hour. "I suppose I'm like a girl. I'm frail, mild, gentle." (There was much emotion behind these words) "That I'm a fairy and a fruit. It's not natural. Boys do heavy work. Girls don't. Boys have jobs, girls don't. I guess I'm just different." (There followed at this point a discussion of bi-sexuality, that is, that all of us have both sexes inside of us, the male and the female, but one, of course, predominates. He was told that until the age of two or three little children didn't know there was a difference in the sexes and they both acted very much alike and that the remains of these early, childish infantile feelings are never lost, only forgotten, that the child lives on in us forever.) "I'm shaking to pieces now. I'm the same as everybody else. I wanted to know about these things always, but even my family doctor talked in a low voice and blurted it out and then said 'Oh, you'll learn later on'".

In our next interview, the patient brought in a dream. "Mother and I are on a beach. There is sand all around us. The water is in the front. The waves are breaking nicely. Then they get higher and higher and then suddenly one big wave works up to where we are and everybody backs up and suddenly we're swimming out in the ocean and there's no beach in sight. Just my little sister, my Mother and me. I was on top of my

little sister and she acted like a log. In the distance I suddenly see a huge gigantic wave. It breaks once. Then we're on the beach again, and the waves break just as big as before right in front of us, but they don't hit us this time."

These were the patient's associations to the dream: "I wonder what the world and life are like. I'm nervous and excited. Everything comes to you all at once. Suddenly I'm a little child and now I'm growing up. In the dream Father is left out, just Mother and my little sister. I never go to Father for anything. I dislike him. He is no support for me. He doesn't make me feel better ever. He's not much good for anything. If something would happen, I really have no one to turn to. In the dream the only support I have is my little sister. It makes me feel as if I were almost a two year old child, but at least I'm supporting myself. I know the rest of the dream, too. The waves get bigger and bigger, but they don't break. I guess what might happen is I'm growing up and it's like coming here, it makes it not so terrible after all. I'll learn to understand or at least I hope I will."

In the next interview, the patient told me his Mother had a miscarriage. He expressed ideas and feeling about more children. He definitely didn't want any. "I'd have to share with somebody else and really I don't want that now. There are four of us, and I think that's enough. I had a daydream. I saw all four of us in the living room. My Mother and Father were near the fire place. My little sister was at the foot of the stairs. Mother and Father and my sister were all very clear. I looked very foggy and faded. They were all the same height, but me, I'm a little shorter." The associations to the daydream were "I feel I'm kind of done with as far as Mother and Father are concerned. I'm almost as tall but I'm like a white mist, an outline. I'm blurred. I'm out of the picture, and therefore I'm not very important. They are all looking at my little sister. I feel as if I'm almost as big as they are, but not in the right perspective. It's as if I'm an outline, like the negative of a picture I have eventually to develop myself, and I think I'm doing it here."

The next interview we talked of making more friends. "I don't even say hello. I never did, but I want to now." We brought up the question of girls. "I go to dances at Mother's insistence. I have no real desire to. When I was growing up, I only played girls' games. I never played boys' games. When

the boys say hello, I feel funny inside, self-conscious and stiff. I can't relax. I'm too nervous. With girls, I'm too shy. I'm not sociable. I'm not up to their level. I feel inferior." (The patient was bringing out material that was full of meaning, full of embarrassment and full of pain. It was material that could be used for later strengthening of this boy's personality, for strengthening his ego, by allowing him to appraise himself realistically in contrast to his fantasy.)

The next interviews brought material which concerns his thoughts of a career. He wants to do something that might be related to radio or television or photography. In essence, it was doing something behind the scenes. It reminded him of his looking through a keyhole into a room, and of a smutty joke. This brought up the question of sex and reproduction. He then had a day-dream "You are a sly and wicked character playing the role of a psychiatrist and showing me bad things and making me disgusting like the rest of the people and trying to make me think that I was horrible underneath, and you are trying to wreck my life. I don't want those things."

As the interviews continued, he talked of marriage. "What happens? Do they mix blood; do they mix urine?" The patient had very primitive ideas about sexual relations. He had very little realistic knowledge. He then told me of three wet dreams. In the first dream he saw a man lifting weights. In the second one, there were men all around with their shirts open. They seemed physically strong. In the third one, a girl was standing next to him, and his breast rubbed hers. The dreams showed a progression from the stimulation first from an object without life; then from a person, a man, with the shirt open, finally to a woman, as if he, too, were progressing psychosexually. Further interviews brought the assertion "I must be changing very gradually. Before I was stiff with people. Lately I can talk better. It started about a month ago, and it gets easier every day." He brought up more sexual material, talking about girls and asking about specific, detailed information. All his questions were answered truthfully and specifically, in non-technical language.

In attempting to formulate and understand this case, we must of necessity understand the Mother and the Father. We see the Mother as an aggressive, domineering woman. She is a third child. The two preceding

siblings were also girls. It is not difficult to imagine the parents hoped the third child would be a boy. When parents are thus disappointed, very frequently they attempt to make the child into the image of whichever sex they desire, in this case, boy. This Mother became a tomboy — to please her own parents? When the next sibling is a boy, she may become jealous of all boys, of all men, because she really wants to be a man herself. In her everyday life, she exhibits desires to control, to want to be the head, to be aggressive. She has conflicts with those who by social custom are the controlling or more aggressive people, namely, men. She picks a passive, unmasculine man to be her husband. She keeps him a girl, so to speak. Then she has a son, and her feelings about her husband are extended to include her male child. She is domineering and controlling and gives him no chance to express aggression, no chance to ask questions about the world or sex or life. He starts to hate women, who are always controlling him. He turns to his Father. What does he find there? Again by coincidence the Father is the third sibling. The first two are boys. The same pattern might be exhibited here. The parents want a change of sex, and they unconsciously make him into a girl. Attempting to please his parents, he may become passive and dependent as this parent is. When George turns to his Father, he has no strong, masculine figure with whom to identify or emulate, and he is caught in a trap. To get love from his Mother he has to be weak and a sissy, a girl. If he is a girl, he is a girl like his Mother and wants what his Mother wants, namely, a man. On the other hand, if he copies his Father, again he is caught and becomes passive and dependent, like his Father. This family conflict is frequently found in the background of overt and latent homosexuality. His Mother makes him a sissy by keeping him dependent and passive, and then turns around and taunts him for these very things. This is her way of getting revenge against men, whom she hates. "Why don't you go out and play with the boys and be like the rest of the boys?" These taunts only perpetuate the cycle of hostility, dependence and passivity. The patient has identified with the feminine-male his Mother married, namely his Father, and the female image his Mother has of her male child, namely himself. This boy has no other sources of identification. Therefore when his female-making Mother tells him to go out and be a man, he can only become angry. In

treatment, he wanted me to work things out for him, to be dependent on me. He reacted to me as if he were a girl, seductive, clinging and dependent. If I satisfy his original expectations of me, he is caught, because the person who acted this way with him previously, was his Mother who controlled him, and he becomes afraid, lest I control him also.

Progress in treatment started with his understanding of his relationship to his Mother and his Father, of his need to please his Mother by being dependent and passive, and of his need for but his rebellion against being controlled by his parents.

The case illustrates a relation between doctor and patient which is psychotherapeutic. George developed a feeling for the doctor which could then be utilized to allow the boy to understand himself and grow

psychologically and socially. The boy is not yet well but he has progressed sufficiently and has developed enough insight so that he is no longer overwhelmed by the problems which were producing his femininity.

That his personality was not laid down in accordance with fixed heredity patterns is shown by his response to treatment. George's personality can be understood in terms of the unique qualities of his own parents and his own life-situations. The biology of the mature human being is not homosexual but it can be made so by developmental factors. The formation of character is not static and is consequently amenable to change. This possibility of change is the basis of dynamic psychotherapy.

1. Perloff, W. H. Role of the Hormones in Human Sexuality. Psychosomatic Med. August 1949, Vol. XI. No. 3, May-June, 1949.

MEDICINE IN THE NEWS

THOMAS C. POINTS, M.D.

"Are You Eating Your Way to Arteriosclerosis" — Steven M. Spencer — *The Saturday Evening Post*, October 21, 1950, page 38.

The *Post* scores again in my books. They present this very interesting subject in a way that is good reading, educational and factual and yet make it plain throughout that the problem is not by any means settled nor will it be tomorrow. The whole question is summed up in the following quote (and it is the first few paragraphs and not deep inside like most): "Exactly what this means to present or potential victims of the disease is the question of years in arteriosclerosis research — perhaps the question of the century. What it appears to mean is that we may ultimately have (1) a blood test to detect early arterial disease, and (2) a dietary method of checking or preventing its progress. But it will be months or years before we can be sure that the blood spinning studies will lead to these practical goals."

If you haven't read up or understand the late research in this field, you will enjoy reading this article as I did and find a simplified explanation. I only wish all articles were as good as this one.

"What Every Husband Should Know About Child-birth Pain" — Lawrence Galton — *Better Homes and Gardens*, November, 1950, page 14.

After reading this over I haven't found out what husbands should know except that the patient has the most severe pain in the second stage than in any other ailment and I believe most papas already know that. This article helps neither the patient nor the obstetrician. It tries to dream up the Read method but that's like telling a child a needle won't hurt and then jabbing as hard as possible with a dull point.

"Does Rhythm Work in Birth Control" — Amy Selwyn — *Coronet*, November, 1950, page 34.

This article was written, I believe, wholly for the sensation of sex talk so more copies would be sold; as evidenced by the fact it is featured title on the front cover. It didn't come to any conclusion but must result in more confusion. Also when it comes right down to the answer of these questions, I believe it is an indi-

vidual problem as to religion, physiology of the couple and to a greater extent, psychology of the individuals involved.

"I Took a Cancer Test" — Ruth Carone — *Coronet*, November, 1950, page 85.

This patient had a preventive exam for cancer in Strang Cancer Prevention Clinic. It is well written but will leave a false impression as to costs, also it gives a good idea of what government medicine would be as she states, "Soon my name was called along with half a dozen others. We were corraled by a brisk young woman who led us, men and women, down a long corridor."

"The Mysterious Power of Cortisone" — Paul de Kruif — *Readers Digest*, November, 1950, page 117.

With this article to steam up the public and the drug companies' sales promotion and the medical profession, the use and abuse of cortisone is going to really blow the safety valve. This product *has not* been proven to be of lasting curative effect as yet and in some cases has been found to be very harmful, as was explained to me by a very conscientious and capable young physician who has made a study of this. It should be used only sparingly in very selected cases and under strict control if it is used at all. But the author doesn't write that way.

"Detached Retina" — Maxine Davis — *Good House-keeping*, November, 1950.

Another article of scare and worry type — just something else people will have to think is wrong with them. This is very uncommon and by the time the article is waded through the reader knows no more than he did before except it might happen and then a very bad thing has occurred (according to the lady author).

"Miscarriage" — J. D. Ratcliff — *Woman's Home Companion*, November, 1950.

This article will be a help for those women who have had this trouble because of the large emotional factor. This article will give women some hope but also it will cause a great deal more worry because of the fact it sows the seed of doubt in their minds but along a different route.

GOALS IN PSYCHOTHERAPY*

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Psychiatry, which for many decades was on the fringe of medical respectability, has been recognized as having a significant role in the practice of medicine by many physicians during the past 10 years. Although most physicians have some understanding and knowledge of the physical therapies used in psychiatric practice, therapies such as electro-shock and insulin coma therapy, there exists in the minds of many physicians doubts as to the rationale of psychotherapy. This difficulty in comprehending psychotherapy and its goals is easy to understand, since we, as physicians, have been trained in the philosophy of medicine wherein we establish a diagnosis and upon the basis of this diagnosis, do something to the patient which is calculated to make him well again. It is easy to understand the rationale of the use of electro-shock in the treatment of a depressed patient, for we have done something to the patient with the hope that he will recover from his depression. But, what of the patient who goes to the physician's office for an hour's interview, and perhaps goes repeatedly to the physician's office without the physician doing anything to his body and without taking from the doctor's office a prescription or other tangible evidence that the doctor is doing anything to get him well? What manner of medicine is this which is in so much contrast to the time-honored expectations of both physician and patient that the physician will do something of a material nature to the patient in order to make him well?

Strange, is it not, that the oldest form of medical treatment, psychotherapy, which in its broadest terms may be defined as the use of psychological factors in the treatment of sick people, is the least familiar method of medical treatment to most patients and to many physicians? In the dawn of history, we know that psychological efforts were made to treat disease — by the use of magic,

superstition, mystical rites, incantations, and witchcraft. Many people today believe that medical psychotherapy is akin to quackery and do not understand the scientific basis of modern psychotherapy because of the persistence in their minds of the unscientific historical background of psychotherapy. Like the intelligent, phobic girl who wrote, "Are there a couple of magic words or something I can tell myself to bolster my nerve enough to come to Tulsa?", there are many intelligent people today — including some doctors — who believe there is something magical about psychotherapy. It is not my intention to discuss the many misconceptions and prejudices concerning the psychotherapeutic process, but to try to point out some of the objectives which we may attempt to achieve in psychotherapy.

There is a considerable difference of opinion in medical circles concerning the scope and limitations of psychotherapy; opinions which may vary from the belief that nothing can be accomplished with psychotherapy to the expectations that miracles can be performed. Actually, in psychotherapy we expect to achieve a success comparable to that achieved in other fields of medicine. We may expect to cure a few patients in the sense of enabling the patient to function in a highly economical manner, unencumbered by significant neurotic traits. A few patients we may be unable to help. Too often we see patients whose emotional illness, like far advanced carcinoma, may have progressed to such a malignant degree that it will defy the best known psychotherapeutic efforts. By and large, most of the patients seen in psychotherapy will be helped to varying degrees. We may not cure many patients to the extent that they will have no neurotic traits, but we do expect to help patients function in a more satisfactory and comfortable manner. Just as we do not expect to cure the diabetic, the cardiac, the arthritic, and many other patients we see in medical practice, most of the patients

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treated with psychotherapy may not be cured either, but like the diabetic and the cardiac, we expect the patient to be helped to such a degree that he may again become relatively well adjusted and capable of being socially useful. Just as the tuberculous patient or the polio patient may, following treatment, have crippled bodies which prevent them from performing at their maximum efficiency, people with emotional illness, after psychotherapy, may still have personality defects which may impair their efficiency to some extent but does not prevent them from leading useful lives.

The goals in psychotherapy, then, are similar to the goals in the rest of medicine, modest and realistic. We do not expect to make our patients over into people who have peace of mind, who have no worries or fears. Many of our patients are seeking this — a happy state of contentment and peace, but unfortunately the price for such a state of tranquillity is high. It may be found in the back ward of a mental hospital where the patient may have all his needs supplied and may while away the hours in reveries of controlling the universe and creating a world wherein everything proceeds as the patient wishes it. In alcohol, one may find temporary peace of mind and relief from fear and worry; or, in suicide, one may find a permanent relief from worldly cares. But, in the world of reality, there is contention, hate, prejudice, and uncertainty, as well as love, cooperation, and other constructive forces.

It is not our primary aim in psychotherapy to let our patients cry on our shoulders because of their inability to cope with an unsympathetic world, though the transitory relief this affords may be all we can accomplish in some instances. Toward our patients we must adopt a sympathetic, understanding attitude, but our ultimate goal is not to make the patient dependent on us for support hence forward, but to try to bolster the personality assets of the patient, to enable him to have the courage to live in the world of reality with relative inner comfort and security and without having to resort to the use of regressive neurotic and psychotic ways of behaving.

The first and most important goal in psychotherapy is the pervention of the development of incapacitating emotional illnesses. It is here that the general practitioner is in an advantageous spot to eliminate the seeds of emotional illnesses, the ignorance, misinformation, and unhealthy

attitudes and ways of behaving, seeds which potentially could blossom at a later date into an incapacitating illness — just as the elimination of a leukoplakia may prevent the later development of a cancer. A young man comes into the general practitioner's office depressed, thinking of suicide, since he believes he has gonorrhea which will cause him to be a disgrace to his family. A careful examination of his urine and gleet discharge fail to reveal gonococci, and the patient is reassured he does not have gonorrhea and is given some educational advice concerning the prevention of venereal disease. The relief from depression is immediate; the young man takes new hope, his discharge stops, and he is able to continue functioning in a normal manner. How different from the young man who goes to the physician with vague, ill-defined precordial pain. Examination of the heart reveals a soft, blowing systolic murmur with no cardiac enlargement or arrhythmia and a normal electrocardiogram. The physician believes the murmur to be functional but isn't sure and certainly doesn't want a colleague to find later that he has made a mistake, so he tells the patient that the examination is normal except for the murmur, which he believes is of no significance, but that he should not engage in any strenuous activity and that he should return in three months for a check-up. In the meantime, this emotionally insecure man is in doubt as to whether his heart is normal or not, and when I see him one year later he is a semi-invalid who has been unable to work because of precordial pain, palpitation, fatigue, tension, and insomnia, all admittedly functional now, but alas! now presenting the picture of a full-blown cardiac neurosis. One can only speculate what the outcome would have been had the patient been decisively reassured that he had no heart disease when he was originally seen.

Reassurance, re-education, suggestion, persuasion, and other minor psychotherapeutic techniques are necessary in the prevention of neurotic illnesses. Physicians, daily, by their calm assurance and the sense of confidence which radiates from them, are alleviating fear and anxiety in their patients and creating hope and confidence in recovery, just as some physicians, by their uncertainty and lack of feeling for sick patients, may be adding to the fear and insecurity of an already emotionally insecure patient.

Our second goal in psychotherapy is in alleviating or eliminating the overt symptoms of emotional illness. Here, again, simple methods of psychotherapy may be able to accomplish our goal. In most instances, however, the use of reassurance alone may be inadequate in relieving a fully developed emotional illness. Often the simpler methods of psychotherapy must be combined with the patient's understanding of the meaning and need for his neurotic symptoms. A 23-year old married woman, shy, inhibited, and highly religious, consults me because she is afraid that she might harm her five months old baby, so afraid that she refuses to touch it unless someone is with her. It will do no good to reassure this girl that she will not harm the child — before I see her she has already been so assured. As a matter of fact, if her illness persists, she might actually commit infanticide although the idea is odious to her. It is necessary for this girl to understand the reasons she has such unacceptable thoughts, and in three visits she is able to recognize the hostile nature of her feelings toward the child, to accept the fact that most women resent to varying degrees the inconvenience and demands that a newborn baby makes upon them. She recognizes and accepts that good mothers may have such hostile feelings toward children. She can now satisfy some of her own needs for pleasure by participating in some recreational activities without guilt feelings and finds that she now has less resentment toward the baby and now no longer fears she will harm the child.

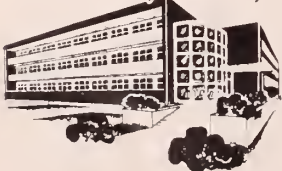
In emotional illnesses of long standing, the unconscious needs that the symptom is serving may not be as near the level of consciousness as they were in this woman. There may be many neurotic defense mechanisms being utilized in chronic neurotic patients

which must be slowly removed before the patient may be relieved of his neurotic symptoms. A neurotic woman who has anxiety, depression and phobias of many years' duration, who has previously been treated with electro-shock therapy with only transient relief, shows many neurotic defenses that must be removed before she is able to say months later "It makes me so mad that I have been so childish in my attitudes, especially when I think how sure I was that I was not immature — that I accepted responsibilities and faced obligations and did the things I should . . . and I feel that others have known it all along." And in truth her neighbors have told her these things occasionally through the years, but because of her emotional blind spots she felt that such observations were made by perverse and envious friends.

Fortunately, most patients may be treated successfully without the need for such long and time-consuming psychotherapeutic efforts in the hands of a skilled therapist.

It is important for the physician to have in mind what he hopes to accomplish in treating his patient, taking into account the nature of the illness, the patient's personality and the physician's own capabilities in psychotherapy. I believe that for most physicians there is a tendency to underestimate what can be accomplished in psychotherapy, primarily because many physicians, for various reasons, have never attempted any systematic utilization of this important method in the treatment of sick patients. The physician who has some knowledge of the social environment in which his patient lives, who has some understanding of human emotions, and who has, as Sir William Osler describes ". . . an infinite patience and . . . an ever tender charity toward these fellow-creatures", can help his patient attain the modest and realistic goals set by the physician.

That More May Live Longer



Attend the Opening of the

OKLAHOMA MEDICAL RESEARCH FOUNDATION

In Oklahoma City December 17

FRACTURES ABOUT THE ELBOW IN CHILDREN*

ATHA THOMAS, M.D.

DENVER, COLORADO

Fractures about the elbow occur commonly in children and not infrequently are accompanied by marked displacement of the fragments, which offer difficult problems in reduction and fixation. In addition the severe soft tissue injuries which often accompany these fractures may present complications far more serious than the fracture itself.

In discussing the treatment of such fractures it should be stated first that every severe fracture, particularly if involving a joint, presents an individual problem, and methods of treatment may vary considerably in each case depending upon the type and severity of the fracture, the age of the patient, the soft tissue complications, and the personal choice of the surgeon. Skill, judgment and experience are of the utmost importance in determining the treatment of choice. Even at best, poor results may occur, with limitation of motion and subsequent deformity from growth disturbance; it is thus advisable to give a guarded prognosis in many cases.

It should be pointed out further that the methods of treatment as presented in this discussion are those which, in the author's own experience have proved successful and satisfactory in his hands; and although presented somewhat dogmatically for the sake of emphasis, they certainly do not imply that they necessarily are the only satisfactory methods. It is well recognized that treatment of fractures varies considerably with individual surgeons and no doubt other methods than those described here may give as good if not better results in other hands. In discussing treatment, therefore, emphasis is placed on basic principles rather than on details of technic.

This discussion is limited to those fractures involving the lower end of the humerus, as time will not permit consideration of fractures of the upper end of the ulna

and radius, important as these fractures are. For convenience and simplicity, fractures of the lower end of the humerus are considered under the following three groups: supracondylar fractures; fractures of the capitellum and lateral condyle; and fractures or separations of the median epicondylar epiphysis. Fractures other than those included in these groups occasionally occur but the basic principles of treatment outlined for the above will apply to all.

ANATOMIC CONSIDERATIONS:

There are certain anatomic considerations that are of importance in the treatment of fractures about the elbow. At birth the lower end of the humerus is entirely cartilaginous and later ossification proceeds from four centers which appear and fuse at different ages. A knowledge of the age at which these take place is of the utmost importance in properly interpreting roentgenograms of this area. Cartilaginous lines occasionally are mistaken for fractures and displaced ossification centers are frequently overlooked. The largest center and the first to appear is the capitellum, which appears at about two years and which coalesces with the trochlea and lateral epicondyle to form the lower epiphysis of the humerus which unites to the shaft of the humerus at the sixteenth or seventeenth year. The median epicondylar epiphysis appears next at the age of five to seven and fuses at 18. The trochlea appears at the age of eleven, fusing at 17. The lateral epicondyle is the last to appear at the age of 12 and rapidly joins those of the capitellum and trochlea to fuse with the humeral shaft at the age of 17.

Considerable normal variation exists in these age figures, and they are difficult to remember; in addition the roentgenographic appearance following injury is often confusing; so it is frequently advisable to take roentgenograms of the opposite elbow in identical views for comparison as an aid in accurate interpretation.

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association June 7, 1950.

Also of importance are the normal angles of obliquity of the lower end of the humerus with the long axis of the shaft. In the antero-posterior direction the lower articular surface of the humerus has a forward projection of 45 degrees. In the transverse axis there is a downward obliquity from the lateral to the medial side varying from five to 20 degrees. This transverse obliquity of the lower articular surface of the humerus produces, when the elbow is extended, what is known as the "carrying angle." Accurate restoration of these normal anatomic angles is important if permanent deformity and loss of function are to be prevented.

A knowledge of the attachment of the muscles of the forearm to the humeral condyles is also essential in order to understand the mechanism of single condylar fractures, which will be discussed later.

SUPRACONDYLAR FRACTURE:

This is the most common fracture that occurs about the elbow in children. The mechanism consists of a violent upward thrust from a fall on the outstretched arm and the classical deformity is that of backward displacement and rotation of the lower fragment. The associated soft tissue damage and hemorrhage produces marked swelling in a very short period of time. The swelling soon may become so extreme as to seriously impair circulation and to jeopardize successful replacement of the displaced fragments; therefore early reduction is imperative. These fractures are *real emergencies* and should be seen at once and definitive treatment instituted as quickly as possible. A careful examination for nerve injury and circulatory disturbance should be carried out prior to reduction. Motion of the fingers, the radial pulse, and temperature of the hand should be examined and the presence of swelling and cyanosis of the fingers noted. Roentgenograms should be taken in at least two projections, antero-posterior and lateral, prior to attempted reduction.

If the fracture has been seen late and the swelling is so marked that re-position of the fragments cannot be maintained in the flexed position, then it is advisable to suspend the arm overhead in balanced traction with the elbow extended for a few days. It should be remembered, however, that the best preventive for ischemic paralysis is early re-position and adequate immobilization of the fragments. The old, commonly heard adage of "wait until the swelling goes down" rarely applies to this fracture — or

to any fracture, for that matter!

A general anesthetic should *always* be administered as these fractures are very painful and complete relaxation is essential. It takes a surprising amount of force to reduce this fracture and the aid of an assistant is desirable. While countertraction is exerted on the upper humerus by the assistant, the operator grasps the pronated wrist in one hand and the posterior surface of the elbow in the other and exerts force traction distally with the elbow in the hyperextended position. The lateral displacement and rotation deformity are overcome and then while pressure is being exerted with the fingers posteriorly on the lower fragment and with the thumb anteriorly on the upper fragment, maintaining traction all the time, the forearm is brought into the flexed position, well beyond a right angle if the condition of the circulation permits. The flexed position maintains the reduction by means of the taut broad triceps tendon which forms an excellent posterior support preventing recurrence of the backward displacement of the lower fragments. The use of the fluoroscope is of considerable aid in checking the reduction before applying the immobilizing dressing, but should not be depended upon for the final check. Following application of the dressing roentgenograms should always be made in the two projections and in the operating room *before the patient returns to his room or recovers from the anesthetic*. A *wet* plaster cast does *not* prevent the taking of a roentgenogram of sufficient detail to show accurately the position of the bony fragments, in spite of the insistence of some X-ray technicians to the contrary! The fragments may become displaced during the application of the splint and it is far simpler to repeat the reduction at the time the patient is still anesthetized, rather than have to wait until later. In addition, the roentgenographic plate gives a valuable permanent visual record which sometimes is of great importance for medico-legal protection.

Before the application of the dressing the radial pulse and the peripheral circulation in the fingers are carefully noted. If there is doubt as to the adequacy of the circulation then the forearm is brought down to a less acute angle and the circulation again checked, care being taken to maintain the position of the fracture. In determining circulatory impairment, it is the author's experience that the rapidity of return of the pink color following pressure on the finger-

nails is more helpful than the quality of the radial pulse.

As a rule this method of reduction produces satisfactory re-position of the fracture, and rarely if ever is open operation indicated in these cases. In fact, even though accurate anatomical re-position cannot always be obtained by closed methods, the position rarely can be improved by open operation, and often the functional result is definitely more impaired following open surgery. One exception is when treatment has been so greatly delayed that closed reduction is impossible.

Many methods have been described for maintaining the flexed position following reduction — adhesive plaster loops, posterior splints, circular casts, et cetera — all of which no doubt have proved satisfactory in their advocates' hands. The description which follows is that of a dressing which the author has devised and which, in his own experience, has proved most satisfactory. It has the advantage of being simple in its application and easy to remove, as well as being comfortable, and at the same time maintains very complete immobilization without constriction or pressure in front of the elbow. It consists of a long posterior plaster of Paris splint, or slab, lightly padded with sheet cotton and extending from the acromion process of the shoulder to the mid-hand. This is held in place by a few loose turns of sheet cotton encircling the extremity but carefully avoiding crossing the flexor crease of the elbow in the antecubital space. This posterior splint is then reinforced by two short plaster splints, one medially and one laterally, crossing on each side from the arm section to the forearm section, and overlapping at each end, thus forming a continuous loop about the arm above and below the elbow. This gives strong lateral support, preventing rotation of the fragments and maintaining the flexed position of the forearm firmly without any encircling constriction about the elbow. The dressing is completed by the application of more turns of sheet wadding to facilitate easy removal and finally an ACE (cotton elastic) bandage. This dressing, which comes off in two sections, is very easily removed for active exercise and can be re-applied with minimum discomfort. Later in the treatment when less rigid immobilization is desired the cross loop can be discarded, using only the posterior splint.

The aftercare of supracondylar fractures is a most important part of the treatment

and must be carried out meticulously under the closest supervision and direction of the physician. Circulatory impairment is the greatest hazard and when it occurs irreparable damage may result within a few hours. It is therefore most important that the nurse or parents be warned of this complication and be informed as to the early signs of circulatory deficiency. It is also well to see the patient frequently and certainly within the first 24 hours after reduction. The patient should be instructed to move his fingers frequently in order to maintain circulation.

Early motion is desirable in restoring function and can be carried out safely after the tenth or twelfth day, if carefully supervised. The splint is removed temporarily and the elbow carefully supported to maintain the flexed position; then very *gentle* guided active motion is carried out within the limits of pain. It is essential that these exercises be very gentle at first and that the child not be hurt; first, because he will become frightened and apprehensive and will not cooperate in the exercises, and secondly, forced painful motions are definitely harmful, delaying recovery and often resulting in excessive calcification of the surrounding soft tissues. Above all, the elbow should never be forcibly manipulated under anesthesia.

With time, patience, and persistence full motion usually can be restored, but it may take some months. Encourage the patient to carry out active motions himself. Later resistive exercises are of value. The carrying of weights or swinging on bars as is so often advised, are of no value whatsoever.

For the first three weeks the exercises are carried out, daily if possible, and preferably under the physician's supervision. Union takes place rapidly and immobilization can be safely discontinued after three weeks. The exercises can then be continued daily at home under the supervision of the parents.

Parents often become discouraged and impatient at the slow progress sometimes made in these cases and they must be reassured frequently, and patience on their part encouraged.

FRACTURES OF THE LATERAL CONDYLE AND CAPITELLUM:

The seriousness of single fractures of the condyles is not well appreciated. Unless accurately reduced and fixed, usually by open reduction and internal fixation, the outlook is not good. Displacement is common, due

to the force of the powerful forearm muscles attached to the condyles, pulling the fragment down and even rotating it end-over-end. As has been emphasized by several writers, non-union or mal-union is common, followed by growth disturbances with increasing deformity and loss of function.

Fractures involving the external condyle and capitellum are particularly prone to an increasing cubitus valgus deformity due to a disproportionate slower growth than that of the internal condyle and trochlea. This increasing deformity often produces a late ulna palsy, due to excessive stretching of the nerve as will be described later.

Early open reduction and fixation is essential in this fracture, as experience has shown that delayed open reductions are far from satisfactory. Although union in good position may be obtained, subsequent epiphyseal changes with deformity and impairment of function almost uniformly follow in late cases.

FRACTURE OF THE MEDIAL EPICONDYLAR EPIPHYSIS:

This is a true epiphyseal separation of the medial epicondyle and it occurs more commonly than is realized. Also the seriousness of the injury is not well appreciated and it is often overlooked or improperly treated.

According to F. M. Smith, this injury is always accompanied by a lateral or posterior dislocation of the elbow. The mechanism has been described as follows: The child falls so that a quick hard pull is exerted on the flexor group of muscles attached en masse to the internal epicondyle. The epicondyle with its attached muscles, becomes separated from the humerus and the median lateral ligament tears away. The ulna and radius dislocate laterally or posteriorly allowing the loose epicondyle to drop down into the joint beneath the trochlea. The dislocation of the elbow may reduce itself spontaneously but the loose fragment remains usually in the joint. This displaced fragment is easily overlooked in the roentgenogram and for that reason the ossification centers of the lower humerus should be well understood. As previously stated, comparison roentgenograms of the opposite elbow can be of great value in interpreting such cases.

Clinically there is evidence of disability with limitation of motion and tenderness and swelling over the internal epicondyle. With such symptoms in a child between the ages of five and 15, this injury should be expected. Ulna nerve injury is not an in-

frequent complication of this fracture.

Rarely this displacement can be reduced successfully by closed manipulation, but as a rule, as in the lateral condylar fractures, open operation and internal fixation are required. Early and accurate reduction is imperative for a good functional result.

COMPLICATIONS OF ELBOW FRACTURES:

Volkman's ischemic paralysis is by far the most serious and disastrous complication that may accompany a fracture about the elbow. It may develop in a few hours and once the irreversible changes have taken place in the extremity distal to the vascular obstruction the damage is irreparable. The circulatory obstruction is due to pressure from swelling and hematoma or gross displacement of the fragments. The result is permanent nerve and muscle damage with severe deformity and loss of function of the hand.

The early symptoms for which one should be on guard, are swelling, coldness, cyanosis and *increasing* pain in the forearm and hand. The fingers are drawn into flexion and a very valuable early warning sign is extreme pain produced by attempting to passively extend the fingers.

Prevention of this serious complication is most important and it is imperative that the patient be observed frequently and carefully for the above signs. Early reduction and fixation of the fracture is the best preventive. If signs of circulatory obstruction do appear then the dressing should be removed *immediately*, the forearm brought into extension and the extremity suspended overhead. The fracture is disregarded for the time being. Sympathetic nerve block with procaine is often of value. If these measures fail to restore circulation, then an incision should be made through skin and fascia in the antecubital space (fasciotomy) and the hematoma evacuated.

NERVE INJURY:

Injury to one or more of the three main nerves about the elbow occurs occasionally as a complication of elbow fractures. It is always wise to test for nerve injury both before and after reduction. The radial nerve is most frequently damaged in supracondylar fractures. The injury is usually due to pressure or impingement and rarely is the nerve severed. Usually the symptoms are transient and rarely is operative interference necessary. If the radial nerve is paralyzed, the plaster splint should extend to the finger tips, holding hand and fingers in dorsal flexion.

The median nerve is rarely injured in these fractures. Ulnar palsy occasionally occurs as a very late complication of fractures of the external condyle of the elbow. It may occur many years after the injury and is due to a disturbance of growth in the external condyle resulting in an increasing cubitus valgus deformity (increased carrying angle) with resulting tension of the ulnar nerve as it passes behind the internal epicondyle. Treatment consists of transplantation of the ulnar nerve from behind the internal epicondyle to a position in front of it. Ulna nerve injury also may occur in separation of the medial epicondyle but rarely requires operation.

PERIARTICULAR CALCIFICATION AND MYOSITIS OSSIFICANS:

Considerable muscle damage and articular and periarticular hemorrhage occur in supracondylar fractures in children, and organization with calcification takes place quickly. Usually with proper treatment this excessive calcification absorbs in time and causes no difficulty. Under forced passive manipulations, however, the trauma to the organized hematoma brings about microscopic tears with minute hemorrhages, causing increased calcification with extensive infiltration of the tissues with calcium, or even myositis ossificans, resulting in extreme limitation of motion. As previously emphasized, forced painful manipulations or manipulations under anesthesia are contraindicated in elbow fractures.

SUMMARY

(1) Fractures about the elbow in children often are serious injuries, presenting

difficult problems in diagnosis and treatment.

(2) Anatomic considerations are important in understanding and treating such fractures; especially necessary is an adequate knowledge of the epiphyseal centers of ossification.

(3) Fractures of the elbow are real emergencies and demand immediate treatment if serious complications are to be prevented.

(4) Frequent observation and carefully supervised aftercare are essential. Active *painless* motion should be started early, but forced passive manipulations are definitely contraindicated.

(5) Isolated condylar fractures have serious potentialities due to non-union and growth disturbances, unless treated early and adequately, usually by open reduction and internal fixation.

(6) Circulatory impairment is common in elbow fractures and its effects may be far more serious than the fracture itself. Early recognition of significant signs and institution of necessary preventive measures are imperative.

(7) It is wise to give a guarded prognosis in most cases of elbow fractures in children. Growth disturbances with deformity may occur, and full function can not always be obtained even with the best of care.

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MEET OUR CONTRIBUTORS

Kenneth E. Appel, M.D., Ph.D., Philadelphia, Pennsylvania, one of the authors of "Character — Its Formation and Modification," was one of the guest speakers at the 1950 Annual Meeting. Doctor Appel was graduated from Harvard University in 1924. His specialty is psychiatry. Doctor Appel, who has been certified by the Board of Neurology and Psychiatry, is a member of the American Psychiatric Association, American Neurological Association and the American Psychoanalytic Association.

Mitchell L. Dratman, M.D., also of Philadelphia, is the co-author of "Character — Its Formation and Modification". Doctor Dratman was graduated from Hahnemann Medical College in 1943 and limits his practice to psychiatry.

Atha Thomas, M.D., Denver, Colo., wrote "Fractures About the Elbow in Children". Doctor Thomas, whose specialty is orthopedic surgery, was graduated from the University of Pennsylvania in 1922. Certified by the

American Board of Orthopedic Surgery, he is a member of the American Orthopedic Association, American Academy of Orthopedic Surgery, American College of Surgeons, Clinical Orthopedic Society.

Charles S. Grabill, M.D., Lawton, Oklahoma, has an article on "Differential Diagnosis of the Diseases of the Hip in Children" in the December Journal. A 1943 graduate of the University of Oklahoma, he limits his practice to his specialty, orthopedic surgery, and is a member of the Oklahoma Orthopedic Society. He is secretary of the Comanche County Medical Society.

J. E. Tyler, M.D., Tulsa neuropsychiatrist, wrote "Goal in Psychotherapy" in this issue. A diplomate of the American Board of Psychiatry and Neurology in Psychiatry he was graduated from Vanderbilt Medical School in 1942. He is a member of the American Psychiatric Association, Southern Psychiatric Association and Central Neuropsychiatric Association.

DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE HIP IN CHILDREN*

CHARLES S. GRAYBILL, M.D.

LAWTON, OKLAHOMA

Diseases of the hip in children are of prime importance because of the great disability that results if the condition goes without early diagnosis and proper treatment. This paper will discuss the diagnosis of the hip lesions most frequently seen in children from birth to adolescence. It should be emphasized that both A-P and lateral x-rays must be taken and that hip pain is often referred to the knee. Many a hip lesion is overlooked because the x-ray of the painful knee is found to be normal! Lesions most commonly seen are as follows:

- Legg-Perthes' Disease
- Slipped Femoral Capital Epiphysis
- Congenital Dislocation
- Congenital Subluxation
- Traumatic Posterior Dislocation
- Tuberculosis
- Pyogenic Arthritis
- Rheumatic Fever
- Juvenile Rheumatoid Arthritis (Still's Disease)
- Congenital Coxa Vara
- Fracture of Femoral Neck
- Chondro-osteo-dystrophy
- Bursitis
- Snapping Hip
- Anterior Poliomyelitis with Hip Paralysis
- Sprain
- Acute Synovitis

Legg-Perthes' disease is most frequently seen between the ages of four to 10 years. It is more common in boys than in girls and about 10 per cent of the patients show involvement of both hips. The onset is gradual over a period of weeks or months. Limp is the most constant sign but it is not always a painful limp. Adduction and internal rotation motions of the hip joint are limited. Later there is atrophy and some shortening of the leg. X-ray findings show increased density of the head of the femur early in the disease and later "fragmentation". A flat head with a broadened neck of the femur gradually appears after several months or years unless strict non-weight

bearing is enforced. Complete regeneration of the head of the femur takes place in about two to three years time.

Slipped capital epiphysis of the femur is seen between 10-17 years of age. It is more frequent in males and bilateral in 25-30 per cent of the patients. The patient is a fast growing child and usually overweight. The usual onset is gradual with increasing pain in the hip or knee, although 30 per cent of the cases have a history of trauma with a sudden onset of symptoms. The joint is not acutely painful but pain and limp are always present and become worse after exercise. There is an external rotation deformity of the leg with limited flexion and abduction. Slight shortening of the extremity may be found. X-ray findings show the head of the femur to be slipped and displaced posteriorly and inferiorly on the neck. The lateral view always shows the deformity which cannot always be seen in the A-P view. Old cases show deformity of the head and frequently aseptic necrosis has taken place.

Congenital dislocation of the hip is present at birth. It is more common in girls. No pain is present until later life. The most important clinical finding from the time of birth is limitation of abduction of the affected hip. X-ray findings reveal an increased joint space and an increased slant of the acetabular roof. After six months of age the capital epiphysis is seen partially dislocated or higher than seen in the normal hip.

Traumatic posterior dislocation of the hip is easily recognized because of its dramatic onset. The hip is very painful and all motions are markedly limited. The leg is shortened, adducted and internally rotated. X-ray findings reveal the head of the femur to be out of the acetabulum and high.

Tuberculosis of the hip is common in children between three to five years of age; usually under 10 years of age. This condition is very prevalent in the Indian race and about equal in boys and girls. A family history of tuberculosis or a personal contact is fre-

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association June 7, 1950.

quently noted. The symptoms are pain in the hip or knee and night cries due to muscle spasm. The clinical findings consist of afternoon fevers, all hip motions limited because of pain and in some cases generalized tuberculosis. In the acute stage the hip is very painful and held in abduction, external rotation and flexion. In the chronic stage there is less pain and the hip has usually developed adduction, flexion and internal rotation deformities. Laboratory study shows a positive tuberculin skin test, increased sedimentation rate and often a positive chest plate. X-ray findings in tuberculosis of the hip reveal early osteoporosis of the head and neck of the femur and the acetabulum on the affected side. The joint space is widened early in the disease. Later the primary focus is seen as a cyst-like area in the neck of the femur or the acetabulum. Still later there is destruction of the joint space and finally bony or fibrous ankylosis if the disease is not arrested.

Pyogenic arthritis of the hip is seen frequently at any age. The child is acutely ill with a sudden onset of fever and a severely painful hip on any attempted motion. Marked muscle spasm is noted about the involved joint. Laboratory studies reveal a positive

blood culture, an increased WBC and a secondary anemia. Early x-ray findings show a widened joint space. Later, if not corrected by proper treatment, the femoral head and acetabulum show osteoporosis and dislocation of the hip may occur. Later in the course of the disease the joint will become destroyed and a bony or fibrous ankylosis will take place.

Few conditions which are less commonly seen are acute rheumatic fever with involvement of the hip, juvenile rheumatoid arthritis, fracture of the femoral neck with aseptic necrosis of the femoral head, chondro-osteo-dystrophy, bursitis about the hip, snapping hip, anterior poliomyelitis with weakness of the hip muscles, sprain of the hip and acute synovitis of the hip.

SUMMARY

This paper has discussed the differential diagnosis of several common hip lesions which are seen in children. It should be emphasized that careful study both clinically and radiologically must be made to diagnose a hip lesion. Hip pain is often referred to the knee. A-P and lateral x-rays of both hips must be taken for comparison. Early recognition will enable early treatment and can prevent marked permanent disability.

CANCER SYMPOSIUM ATTENDANCE LOW; SUGGESTIONS INVITED

The annual cancer symposium, arranged by the Professional Education Committee of the American Cancer Society, and financed jointly by the Oklahoma Division and the State Department of Health, was held during the week of September 25.

The following out-of-town speakers participated:

East Side

Joshua W. Davies, M.D., Associate Surgeon, Woman's Hospital, New York, N. Y.

John A. Wall, M.D., Associate Professor of Clinical Gynecology, The University of Texas and Anderson Hospital, Houston, Texas

J. R. Maxfield, Jr., M.D., Clinical Professor of Radiology, Baylor University, Dallas, Texas

West Side

M. Edward Davis, M.D., Professor of Obstetrics and Gynecology, University Clinics, Chicago, Illinois

Willard R. Cooke, M.D., Professor of Obstetrics and Gynecology, University of Texas, Medical Branch, Galveston, Texas

Attendance at the meetings was as follows:

East Side

Tulsa	38
Muskogee	28
McAlester	14
Durant	10
Ada	14
Total	104

West Side

Oklahoma City (white)	156
Oklahoma City (colored)	9
Enid	34
Lawton	14
Clinton	11
Woodward	10
Total	234
GRAND TOTAL	338

Gregory E. Stanbro, M.D., chairman of the Professional Education Committee, would be very glad to receive any suggestions or criticisms from those who attended these exceedingly valuable meetings, or from a still greater number who did not attend; possibly for reasons that could be eliminated. Some change in the planning and conducting of these symposia might enlist the interest of a greater number of the doctors throughout the state.

CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Medicine*

HOWARD C. HOPPS, M.D. AND RICHARD E. CARPENTER, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: The case for today poses a number of problems in differential diagnosis, and it illustrates a very interesting disease that we haven't had much opportunity to study here at University Hospital. As a matter of fact, the patient was never at University Hospital. To discuss the clinical aspects of the case we have Dr. Carpenter.

PROTOCOL

Patient: W. W. I., 58 year old white male. Admitted 9-15-48. Died 3-26-49.

Chief Complaint: Marked weakness and shortness of breath; pain in the chest with radiation to left shoulder and down left arm, and nausea and vomiting.

Present Illness: This patient worked as a rock crusher for a number of years, giving up this occupation "many" years ago because of the effect it had on his lungs. He had not worked at anything since 1945. The patient had been in various Veterans Hospitals on numerous occasions. On each admission major complaints were of chest symptoms — primarily weakness with shortness of breath, which was markedly aggravated by effort. On one admission this man was given a diagnosis of conversion hysteria, apparently due to the fact that he complained of paralysis of the right extremity and no organic neurological changes could be found. Repeated examinations for acid fast organisms were negative. The diagnoses of chronic pulmonary emphysema, cystic disease of the lungs, and silicosis appeared to be firmly established. Six months before death the patient was admitted to the hospital for the last time. One month prior to this last admission the patient first noticed precordial pain of dull character which, in its beginning, occurred only after effort. Pain and weakness progressed in severity until the patient became bedfast two weeks before admission. Two days before admission there was an acute episode of severe chest pain accompanied by nausea and vomiting. The pain continued until two days fol-

lowing admission. The patient's private physician sent him to the hospital with a diagnosis of possible coronary occlusion.

Past History: Was essentially non-contributory. There were no earlier signs or symptoms of heart failure in the nature of pedal edema, pulmonary congestion, hemoptysis, or hematemesis, etc.

Physical Examination: Revealed a very frail, dyspneic, white male evincing marked weight loss, cyanosis, wheezing respirations, and clubbing of the fingers. Venous pulsations were observed in the vessels of the neck. There was increased tactile fremitus over the chest and a "board-like" note to percussion. Respiratory excursions of the chest were considered normal. "Emphysematous and asthmatic" type rales were heard throughout the lungs; no "moist rales" were heard. Cardiac tones were faint. A2 and P2 were accentuated, although blood pressure was recorded at 110/70. The pulse rate was regular (86) except for an occasional extra systole. The remainder of the initial physical was essentially negative. The initial impressions were "(1) possible chronic coronary arteriosclerosis, (2) pulmonary emphysema, moderate, secondary to silicosis".

Laboratory Data: Two ECG's done on the first hospital day, and a third three weeks before death, were all reported: "Suggestive of chronic coronary insufficiency". X-ray: The single chest film, taken on the day of admission, was reported: "The appearance of the lung fields in this negative is very similar to that reported on negative data 9-18-47 (—'advanced silicosis with emphysema and possible secondary tuberculosis — nor cardiac enlargement'). There is perhaps collapse of the left upper lobe and more fibrosis in the left lower lobe, also there appears to be slight narrowing of the trachea above carina." *Admission blood work:* WBC's — 16,000, hemoglobin 86% (12.5 gm.); sedimentation rate 20 mm/hr; hematocrit 41%; serology negative; prothrombin time 60% of normal. Daily exam-

inations of the sputum, on ten successive days after admission, were all reported as "No acid fast bacilli found." Prothrombin times done two and three days after admission were reported as 30% and 14% respectively (questionable dicoumarol effect). Urinalysis was essentially negative. Five weeks before death WBC's numbered 12,400 with 80% neutrophils, 13% lymphocytes, and 7% monocytes. Hemoglobin was 15.4 gm. %.

Clinical Course: On admission the patient was considered to be critically ill; he received morphine PRN and was placed in an oxygen tent. Dicoumarol was given from time of admission to the third hospital day. Throughout the patient's hospital course persistent chest pain required continued use of such analgesics as morphine or demerol. Repeated attempts to substitute barbiturates for habit-forming analgesics were uniformly unsuccessful. Three weeks after admission some five and one-half months before death, it was considered that the patient would probably not recover from this episode of illness. Various consultants shared this view and were unable to suggest other than symptomatic Rx. The patient expired quietly at 5:00 p.m., 3-26-49, six months and ten days after his last hospital admission.

CLINICAL DIAGNOSIS

DR. CARPENTER: There is considerable definite information contained within the protocol. We know that the patient had rather extensive pulmonary disease because of his chest x-rays, his rather marked dyspnea, and the clubbing of his fingers. I'd like to review some of the points in the history to see whether or not we can arrive at any further diagnosis than the one that was made on the basis of x-ray findings, namely, silicosis.

The patient was admitted to the hospital because of pain in the chest. We don't have much additional information except that he died six months later. The basis for making the diagnosis of silicosis seems to have been on fairly adequate grounds. We are told he was a rock crusher and we know that exposure to rock dust will produce silicosis under certain circumstances. The size of the particle must be correct, in the approximate range of one to three microns. If it's larger than this, it will not reach the alveoli. The composition of the rock must be correct; there must be free silica (SiO_2). Magnesium silicate will produce asbestos. Finally, the exposure must be over a sufficient length of

time. We don't know where this patient worked, but it is probably safe to assume that exposure to the rock was over a sufficient period of time and of the right sort.

We are told that he had paralysis of the right extremity. I don't know whether that is of the right arm or the right leg. Because there were no organic neurological findings it was suspected that this was a conversion reaction, a form of hysteria. I don't believe we have enough information to contest this supposition. This neurological lesion doesn't seem to fit in with the rest of the picture, so I think we'll drop it from consideration.

Following this he began to have episodes of pain in the chest and left arm. This complicated the picture somewhat. We are told that, at first, this followed exertion — I imagine this to mean that it came on during exertion. If this is so, we would suspect it of being anginal. If it came after exertion it might have occurred after a considerable length of time and then we would think less of angina. We are not told if it was relieved promptly by rest, how long the pain lasted, etc. We would have to know those things before making a positive diagnosis of *angina pectoris*.

The patient then had severe pain which radiated to the left arm and lasted four days (two days before admission and two days after admission). That makes us more suspicious of a *myocardial infarct*, but apparently the ECG didn't bear that out. Two taken on the day of admission and one three weeks later all merely suggested coronary insufficiency. A negative ECG, as you know, doesn't rule out myocardial infarction, but we would be rather bold to make the diagnosis with such negative reports and in the absence of other data, such as elevated sedimentation rate. The patient continued to have chest pains throughout the remainder of his life in spite of the fact that he was now at bed rest all of the time. His pain was so severe as to require narcotics. This is not the usual pattern of *angina pectoris*. During the six months that the patient received narcotics he became addicted so that evaluation of pain during this latter period is not reliable. Since we can't prove a diagnosis of myocardial infarction we should consider other conditions which can cause substernal pain radiating to the left arm. Before going into these things I'd like to go over the physical findings and the laboratory data. Physical findings certainly confirm the impression from the history that

the patient had pulmonary disease because he was cyanotic, dyspneic and had clubbed fingers. May we see the chest films now?

DR. LACHMAN: On the left side the diaphragm is very low. On the right side there are dense fibrous adhesions which keep the diaphragm up. The heart is rather narrowed and its configuration is normal — certainly there is no dilatation. The aorta is essentially normal for the age of the patient. The lung presents a varied density characterized by striations and mottling, but more important than that are the numerous small cysts, a very distinct honeycombing of the lung. Some people might call this primary cystic disease, but it isn't. Corresponding to the very low diaphragm on the left, we have a marked increased translucency in the lower portion of the left lung which represents emphysema. We have then, in addition to fine cystic changes, mottling and striations, which may be the effect of infiltration of the lymphatics. Silicosis certainly could explain these changes. This would be a rare type of silicosis, one accompanied by cystic changes. Another consideration in the differential diagnosis would be congenital fibrocystic lung.

DR. CARPENTER: In anyone with pulmonary disease as extensive as this we would look for signs for cor pulmonale. One of the first things one would notice would be an accentuation of the second pulmonic sound, which the patient is said to have had. An accentuated P2 simply means pulmonary hypertension which, after a time, should lead to enlargement of the pulmonary conus. This doesn't appear enlarged here. The fact that the heart is not enlarged in its transverse diameter is not inconsistent with enlargement of the right ventricle because that does not usually produce enlargement of the transverse diameter. Right axis deviation is not mentioned in the ECG either; if this had been present it would have helped in making this diagnosis. The patient had pulsating neck veins, which means that he had a relative tricuspid insufficiency. He certainly was not in frank right heart failure, however. Did the patient have cor pulmonale and die of right heart failure? We don't know that because we're not told about his terminal course. Apparently he didn't develop edema, an enlarged liver or pleural effusion, or it probably would have been mentioned.

Of patients who die from silicosis, the greatest number, approximately 50%, actually die of tuberculosis. Something like 30%

die of right heart failure. Tightness in the chest, sometimes of a painful nature, is stated to occur in silicosis. Whether it could be as severe as this man's pain was, I don't know. I haven't seen patients with silicosis in which pain in the chest was an important symptom. Another thing that may cause pain in the chest and in the left arm is a *diaphragmatic hernia*. Although we are not told many of the characteristics of this pain, it doesn't seem to be the sort that we see in diaphragmatic hernia. Usually that pain comes on after meals, at least there is some relationship to meals. It is usually worse when a patient is lying down. As opposed to the pain of coronary thrombosis, the pain of diaphragmatic hernia usually runs down the radial side of the arm or the distribution of the fifth cervical dermatome. Also, patients with diaphragmatic hernia often have dysphasia, which this man didn't have. Finally, the pain from a diaphragmatic hernia does not require narcotics. Any patient that has pain requiring use of narcotics over several months makes one think of a neoplastic disease. If we could have seen that some of these nodular lesions in the lung were to enlarge we would be more suspicious of that, but we don't have follow up films.

The patient's pain apparently did not begin very long before this last film was taken, so I think *carcinoma of the lung* is a distinct possibility. It has been reported by some that carcinoma of the lung is more frequent in patients who have silicosis. How could carcinoma of the lung cause pain that would radiate down the left arm? I should think it would be by involving the same plexus of nerves that are stimulated when a person has a myocardial infarction, in other words, from metastatic involvement of the mediastinum. The mediastinum certainly doesn't appear to be widened in this case, however. Other things that might be considered include *dissecting aneurysm*, but there really is not much to make us suspect that. Summarizing all this data I think it safe to say that the patient had chronic pulmonary silicosis with cystic changes, and that he had pulmonary hypertension and probably right ventricular hypertrophy. The cause of death is less certain. We might suspect that he had carcinoma of the lung, but I make this as a possible diagnosis only, rather than to suggest it as a probability.

ANATOMIC DIAGNOSIS

DR. HOPPS: At the time of this man's death one of the most striking things about

him was his marked emaciation. He was a typical picture, in a sense, of a consumptive. All bony prominences were very much exaggerated and he had a death's-head countenance. The layer of adipose tissue in the anterior abdominal wall was hardly measurable. The most striking changes were in the thorax, as would be expected. At the time of autopsy dense fibrous adhesions completely obliterated both pleural cavities so that there was no fluid there. The lungs were removed with considerable difficulty. The right weighed 1920 gm., approximately six times the normal; the left weighed 990 gm. The lungs were cut in numerous planes and an appearance unfolded not unlike that which Dr. Lachman described from the x-rays, and we hit upon, independently, the term "honeycomb", to describe the lateral and posterior aspects. Other changes were present, however, which were quite different from those that Dr. Lachman described in films taken a year before the patient's death. Many of the honeycombed areas grossly suggested patches of beginning necrosis. They were friable, soft, and some had become confluent to produce softened areas up to 2 or 3 cm. in diameter. Occasional regions had progressed to the stage of frank necrosis and in the upper right lobe there was a cavity, 7 cm. in diameter. This was the only true cavity. All through the lungs there was the appearance that here many areas were undergoing necrosis and one got the idea that if this process had continued, these areas would have become more softened, confluent, would have emptied into air passages and, within a month or two, would have produced numerous cavities. The paratracheal and peribronchial lymph nodes were almost uninvolved in this process, a picture which is typical of adult type of tuberculosis. Despite the frequency of this picture we cannot help being impressed by an enormously diffuse, destructive tuberculous process in the lung with minimal infection of the lymph nodes that drain that lung. The heart weighed 310 gm. which, for a man as emaciated as this, who was at bed rest as long as this, represents somewhat of an increase over the expected weight. Furthermore, the right ventricle was thickened out of proportion to the left; it averaged 0.5 cm. in thickness. This we might term as mild cor pulmonale. Otherwise the heart was not remarkable; there was no evidence of cardiac infarction old or recent. The coronary arteries were essentially normal. Incidental changes in-

cluded marked atherosclerosis of the abdominal aorta, a recent anemic infarct of the spleen, 5 cm. in diameter, and a recent infarct of the kidney 0.6 cm. in diameter. An embolic basis for these infarcts was not demonstrated. In a patient as emaciated and debilitated as this, marantic thrombi might have formed. There were no thrombi in the atria at the time of death.

Our final pathologic diagnosis was:

- 1) Silicotuberculosis, bilateral, extensive, with massive areas of caseation and multiple cavities
- 2) Pleuritis, chronic, obliterative, tuberculous
- 3) Miliary tubercles in liver
- 4) Chronic passive congestion of liver and spleen
- 5) Cardiac hypertrophy, predominantly right ventricular (cor pulmonale)
- 6) Anemic infarcts, multiple, of spleen and kidney (single)
- 7) Hydronephrosis of kidney, slight, with interstitial fibrosis
- 8) Parenchymatous degeneration of renal tubular epithelium with presence of numerous casts, compatible with "lower nephron nephrosis"
- 9) Atherosclerosis of aorta
- 10) Lipid depletion and atrophy of supra-renal cortex
- 11) Atrophy with interstitial edema of testes
- 12) Hemangioma of liver (small)
- 13) Emaciation, marked, with serous atrophy of adipose tissue

CLINICAL DISCUSSION

QUESTION: In retrospect, how may one account for the severe pain?

DR. CARPENTER: The active pleuritis with involvement of the diaphragm is the only finding which could account for this, and it might very well have been responsible. This case teaches a number of lessons and one of them is that one should never see a patient with silicosis without considering the strong possibility that he has, is getting, or is going to get tuberculosis.

MEDICAL ABSTRACTS

HEART DISEASE: ITS MEDICAL ASPECTS.—Levine, S. A.; Peter Bent Brigham Hosp., Boston, Mass. *Ann. Int. Med.*, 33:572, September, 1950.

Dr. Samuel Levine, Master Clinician-Cardiologist, presents some highlights in heart disease, common mistakes in diagnosis and management, emphasizing rewards of sound bedside procedures and clinical judgment. *Diagnosis*: (1) *Congenital heart disease* — important to detect and diagnose properly because of high percentage of excellent results to be expected in certain types of congenital heart disease, namely those involving pulmonary stenosis, coarctation of aorta and patent ductus arteriosus. Careful auscultation, unhurried in quiet room, may pick up diastolic murmur in pulmonic area which along with systolic murmurs there may indicate patent ductus; having the patient take deep breaths may bring out a faint continuous murmur in the P₂ area indicative of patent ductus. Cyanosis with or without clubbing, polycythemia, unexplained murmurs or abnormal cardiac silhouette in an infant, child or young adult should arouse suspicion of congenital lesion and further studies by trained experts carried out to determine if lesion is amenable to surgery. (2) *Rheumatic Heart Disease* — emphasis again placed on careful auscultation in quiet room, picking up early aortic insufficiency with patient sitting up, leaning forward, holding breath in expiration, heard best with diaphragm stethoscope; also increasing awareness of active rheumatic carditis in older patients, not confined to the young; index of suspicion of bacterial endocarditis should be high even with faintest murmurs. (3) *Hypertensive heart disease* — rule out curable forms such as those due to adrenalin secreting tumors (pheochromocytoma) or to coarctation of aorta; retinal vessel changes which may be indicative of previous hypertension though pressure at times may be normal. (4) *Coronary Artery disease* — if precordial pain which is present is relieved by slowing of heart rate from pressure on one carotid sinus in neck, pain is almost certainly anginal; if heart rate slowed and pain not relieved, almost certainly not anginal. No conclusions can be drawn if rate is not slowed. History of anginal pain must be sought for in every adult, for many may have it and not mention it. Danger still exists of reading too much into EKG tracings. (5) *Miscellaneous forms of heart disease* — importance of hyperthyroidism in precipitating cardiac damage; constrictive pericarditis is another form of curable heart disease by surgical pericardectomy, suspicions of diagnosis raised by clinical picture of cirrhosis of liver with ascites in patient devoid of history of alcoholism; and with elevated venous pressure in arms; fluoroscopic heart examination reveals feeble or absent pulsations. Heart failure precipitated by cardiac arrhythmias is emphasized; A-V aneurysm may produce heart failure, is surgically resectable. *Treatment* — most common error is in treating supposed heart disease when heart is normal; second most common error is to treat patients with organic heart disease for heart failure when there is no decompensation. Before treatment is begun, definite diagnosis must be established and curable forms considered; second

consideration is whether congestive failure exists. Common errors in management of congestive failure are keeping patients in bed too long when they do better in a chair; too prolonged convalescence, staying away from work for many months with disastrous financial and psychic results; the bed used for sleeping should be elevated at the head by placing eight inch blocks under head posts. Thoracentesis should be done for large pleural effusions associated with failure; phlebotomy is not employed often enough; mercurial diuretics often used too energetically.—Robert M. Becker, M.D.

AIR TRAVEL AND THE CARDIAC PATIENT.—May, S. H. (New York City, N.Y.). *Am. Heart Jour.* 40:363, September, 1950.

The question "Can I travel in a plane?" is frequently posed to a physician by his patient who has heart disease. Doctor May reviews this important question and concludes that at the usual altitudes of commercial air traffic and with the added safety of pressurized cabins, there is no valid objection to travel in modern air vehicles for the patient suffering from heart disease.—Robert M. Becker, M.D.

THE EFFECT OF ANTIBACTERIAL AGENTS ON THE INTESTINAL FLORA OF PATIENTS: USE OF AUROMYCIN, CHLOROMYCETIN, DIHYDROSTREPTOMYCIN SULFASUXIDINE AND SULFATHALIDINE. Darling, W. H., and Heilman, F. R., Mayo Clinic, Rochester, Minn., *Gastroenterology* 16:12, September, 1950.

A comparative study of the effects of the preceding list of antibiotics on the intestinal bacteria of 194 patients with varying intestinal lesions was made. The authors concluded that aureomycin in doses of 750 mgms. every six hours for three to three and one-half days provided the best preoperative intestinal antisepsis.

—Robert M. Becker, M.D.

THE TREATMENT OF INTRACTABLE PEPTIC ULCER. Palmer, W. L.; Kirsner, J. B., and Levin, E. Dept. of Med., Univ. of Chicago Clinics, Chicago, Ill. *Ann. Int. Med.* 33:590, September, 1950.

Is the patient intractable, or is the lesion intractable? This is the question raised by the authors. They feel that in many instances it is the patient and not the ulcer. In those cases where the patients have been on rigid medical regime without apparent healing, true intractability of the lesion can be considered present. In the case of gastric ulcer, the question of malignancy arises and surgical resection of the ulcer is recommended. In the case of a duodenal ulcer, marked deformity with ulcer craters and usually some obstruction or recurrent hemorrhage will be present. For these, the authors have found that reduction of gastric acidity by X-Ray irradiation (total 1650 r in 12 treatment days) to the fundus of the stomach was helpful in many patients, occasionally with dramatic results. They have seen better results following vagotomy than subtotal gastrectomy. They advise judicious use of both medical and surgical procedures in controlling both the patient and the disease.—Robert M. Becker, M.D.

Oklahoma State Medical Association 58th Annual Meeting

Tulsa

May 21-23, 1950

Mayo Hotel

See page 544 for further details



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—Council on Pharmacy and Chemistry, New and Nonofficial Remedies, J.A.M.A. 143:815 (July 1) 1950.



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RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

President's Page

The football season is ended and in all probability the bets have been paid. No doubt many Oklahomans are richer by having backed their home team. Some are probably still counting that Texas folding money. Yes, Oklahoma again produced a winning team and thereby gained national fame and surely will be heading for one of the "bowls" on New Year's Day.

The recent election ended one of the most expensive, ornery, vituperative, mendacious campaigns ever waged in Oklahoma. The citizens of this state certainly are not in sympathy with that type of a campaign and are greatly relieved that it is over. Indeed, most of the evil words and daggerish deeds will have to be forgotten. Let's assume that the best and most honorable men won. Certainly they received the greatest number of votes and by the same token may be cited as the people's choice. Probably our candidates were not elected; nevertheless, any differences which existed prior to the election must now be erased from memory. Let us give full support to those who were fortunate enough to be elected to both state and national offices. Representing the people back home is sometimes a difficult task, but it can be made easier if our contacts with those elected are not allowed to wane. Now is an opportune time to renew and develop a friendly relationship with those men while they are still home and not wait until they become busy in our own State Legislature as well as in Washington. So, every doctor in our state should make it his duty to attempt to improve our relationship with both the state and national representatives.

In times like these a good sound Public Relations Program is very important and it is being stressed by almost every line of business and industry. Realizing the necessity for exchange of ideas and suggestions, the Public Relations Conference of the A. M. A. has called a meeting for December 3 and 4 in Cleveland which immediately precedes the Annual Clinical Session. An outstanding program has been arranged particularly for State and County Medical Societies. Most people in our state and nation are jittery because of the recent developments in Korea and the possibility of a major war plus the trend towards socialism. Therefore, an effective Public Relations Program must be developed with immediate plans for carrying it through. The Public Policy Committee of our State Association is at present working on a program which should be very effective in improving the doctors relations with other business and professional groups; in particular, a program which will reach the youth of our state especially in the highschools and colleges.

Another important meeting in which our profession is vitally interested is the Mid Century White House Conference on Children and Youth. This meeting is to be held in Washington and is scheduled for the same date as the Annual Clinical Session of the A. M. A. in Cleveland. Among the many items on the program regarding children is the question of health. Medical Societies throughout our country have been active in furnishing information on the health facilities in their own communities. The A. M. A. is joining with several hundred other influential national organizations in lending its support to this Conference. The Oklahoma State Medical Association will be ably represented by Dr. George H. Garrison. The Council, at its last meeting, requested that he represent our profession. There will probably be others and it is strongly urged that as many attend this meeting as can possibly do so. There is a possibility that Oscar Ewing and some of his cohorts may wish to make use of the Conference for political purposes. However, the doctors are cognizant of this fact and efforts are being made to thwart any move in this direction. In anticipation of this fact, the doctors are taking an active interest in this conference realizing that their cooperation will strengthen medical society relations with other participating organizations and may help to achieve some worthwhile Conference recommendations.



President

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NATIONALLY KNOWN SPEAKERS WILL HIGHLIGHT ANNUAL MEETING

An impressive panel of nationally known guest speakers will highlight the scientific program of the 58th Annual Meeting of the Oklahoma State Medical Association, to be held in Tulsa next May 21-23, 1951.

The Scientific Works Committee has announced that the following have accepted invitations to deliver one or more papers at the convention:

Dr. Lester R. Dragstedt, Chairman of the Department of Surgery, University of Chicago School of Medicine, Chicago, Illinois. Doctor Dragstedt is best known for the vagotomy operation and many other techniques of stomach and abdominal surgery.

Dr. Ramon J. Castroviejo, Associate Professor of Clinical Ophthalmology, Columbia University College of Physicians and Surgeons, New York, New York. Doctor Castroviejo attracted wide attention in recent years with his techniques of corneal transplants.

Dr. Anton J. Carlson, Professor of Physiology, University of Chicago School of Medicine, Chicago, Illinois. Long a colorful figure in American Medicine, Doctor Carlson is known for his studies of the nature of hunger, the refuting of Pavlov's famous theories of the flow of gastric juices, and the origins of the pulse.

Dr. John L. McKelvey, Chairman of the Department of Obstetrics and Gynecology, University of Minnesota Medical School, Minneapolis, Minnesota.

Dr. James G. Hughes, Professor of Pediatrics, University of Tennessee School of Medicine, Memphis, Tennessee. Doctor Hughes is being invited to appear on the Association program a second time following the wide acclaim of his appearance in Tulsa two years ago.

Dr. Elliott P. Joslin, Professor of Medicine, Harvard University of Medicine, Boston, Massachusetts. Dr. Joslin is acclaimed as one of the foremost authorities on diabetes in the world.

Dr. Harrison R. McLaughlin, eminent orthopedic surgeon and leader in industrial medical circles, New York, New York.

An eighth guest speaker in pathology is yet to be selected.

Dr. Robert E. Funk, Tulsa, General Chairman, has announced that the meeting will again be in the Mayo Hotel. Arrangements are proceeding on schedule and additional details will be announced in *The Journal* from time to time. The sale of commercial exhibits has already begun and a limited number of booths are still available.

The President's Dinner Dance will again be on Tuesday evening, May 22, 1951. A prominent guest speaker will highlight a brief inaugural ceremony and program honoring Dr. Ralph A. McGill, retiring President; and Dr. L. Chester McHenry, the incoming president.

The Scientific Works Committee is asking all members who wish to present papers to submit their requests by January 15, 1951, enclosing a brief synopsis of the subject content. Such material should be addressed to Dr. John G. Matt, Chairman, Scientific Works Committee, 1001 Medical Arts Building, Tulsa 3, Oklahoma. Doctors wishing to have scientific exhibits are requested to write for application blanks to the Tulsa County Medical Society, 1202 Medical Arts Building, Tulsa 3, Oklahoma.

Arrangements for the meeting are under the direction of Dr. Robert E. Funk, Tulsa, General Chairman, and the following sub-committee chairmen: Dr. I. H. Nelson, Commercial Exhibits; Dr. Felix R. Park, Scientific Exhibits; Dr. John E. McDonald, Social Events; Dr. Edward L. Moore, Publicity; and Dr. Berget H. Blocksom, Special Program Events.

"We believe the 1951 meeting will be very well attended due to the splendid scientific program and the many social events being planned," Doctor Funk said. "Every doctor should plan now to attend this meeting."

PREPAREDNESS EMPHASIZED IN DISASTER SYMPOSIUM

Emphasizing that the anticipation of fear is much more terrorizing than fear itself, and that a planned program with materials to carry out such a program is necessary to combat this fear, Moorman Prosser, M.D., speaker on the psychological aspects of disaster, closed the symposium on civilian preparedness for disaster, held at the University of Oklahoma School of Medicine in October.

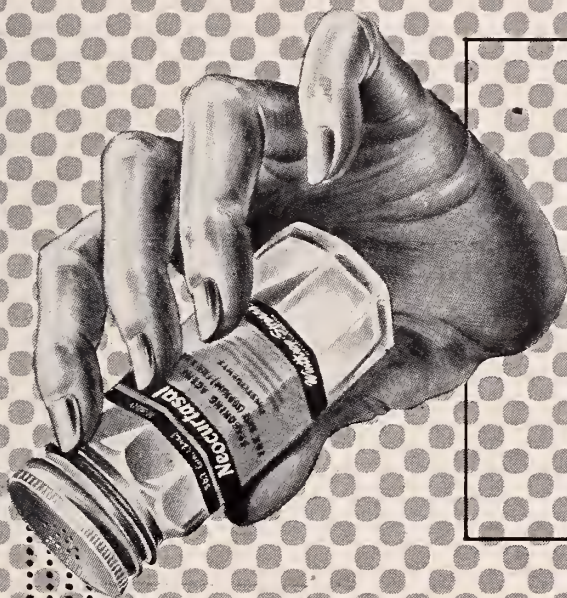
The civilian phase of the program, which also incorporated a three day course for physicians in traumatic and disaster surgery, included a discussion of basic atomic physics, monitoring and evacuation, etc.

Lt. Col. Michael D. Buscemi, M.D., Assistant Director of the Department of Medicine and Surgery, Medical Field Service School, Fort Sam Houston, Texas, explained the types of casualties produced by atomic explosions. Instrumentation of radiation was discussed by Capt. Meredith Mallory, M.D., Instructor, also of Fort Sam Houston, Texas. Edwin G. Williams, M.D., Chief, Radiological Health Branch, United States Public Health Service, was the speaker on basic atomic physics, monitoring and evacuation, and contamination and decontamination. Cleve Beller, M.D., of the University of Ok-

lahoma School of Medicine told the group some of the medical aspects.

Edwin G. Williams, M.D., United States Public Health Service representative who witnessed the Bikini atomic blast experiment, gave the medical and public health aspects of disaster and a review of Oklahoma's disaster relief program was presented by Coble Gambill, head of the state department of public safety, and Grady F. Mathews, M.D., commissioner, state health department. Pointing out that the use of private hospital rooms is not feasible in caring for a large number of casualties, Hal A. Burnett, M.D., of the University of Oklahoma School of Medicine was also one of the symposium speakers.

In some instances home unit softeners can be used to decontaminate water, George W. Reid, sanitary engineer, said in explaining sanitary engineering aspects of disaster. Unprotected food must be disposed of while food covered and canned may be used, Mr. Reid said. Pointing out that residual radiation could go into a water shed and drinking water, he gave his audience the example that a strawboard in Vincennes, Indiana, months later contained radiation from an atomic explosion in New Mexico.



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INTERNAL MEDICINE COURSE TO RECESS FOR HOLIDAYS

Physicians enrolled in the Oklahoma State Medical Association postgraduate course in Internal Medicine are reminded that the course will recess during the Christmas holidays December 18 to January 15.

Teaching centers for the present circuit are El Reno, Chickasha, Anadarko, Lawton, and Duncan. Instructor Robert M. Becker, M.D., reports good attendance at all centers.

REPORT ON MOBILE CANCER DETECTION CLINIC

The Oklahoma Division of the American Cancer Society submits the following report on the mobile cancer detection clinic:

During the year ending August 31, 1950, the Mobile Clinic visited 25 counties in the state, ranging from Ottawa to Jackson. A total of 1,364 patients were seen of whom 103 were positive and 128 suspicious. A breakdown of the patients shows

		Positive	Suspicious
Breast	8 per cent	2.3	9.2
Gynecology	21 per cent	2.8	8.1
Internal	32 per cent	7.8	10.2
Dermatology	39 per cent	14.3	14.3

It will be noted that positive cases comprise approximately eight per cent of all patients. This is about the same as it was during the preceding year, but a great deal less than during the first year of the clinic five years ago. At that time the positive cases were 23 per cent.

In conducting these clinics, a total of 5,087 miles were driven. The staff was drawn from

Oklahoma City	19
Tulsa	4
Enid	1
Ponca City	1
	—
	25

Because the visiting staff generously furnished their services without charge, paid advertisements were eliminated, and other economies in clerical work instituted, the cost per patient was only \$5.50. This includes the estimated percentage of the Executive Director's time devoted to these clinics.

RESOLUTION

WHEREAS, the passing of Doctor Hardin Walker has been keenly felt by his colleagues of his profession, and the citizens of his community, where he has served for many years with loyalty and understanding far beyond the call of his profession, and,

WHEREAS, his death will leave a void, not only in the hearts of his family, but in the hearts of all who knew him and benefitted from his benevolence and wisdom, and,

WHEREAS, his cooperative spirit will be missed at Medical and Civic meetings,

NOW THEREFORE BE IT RESOLVED, that we make known our sentiments, and that a copy of this resolution appear in the minutes of the Northwestern Counties Medical Society, and a copy sent to the Oklahoma State Medical Association.

s/ M. H. Newman, M.D.
C. E. Williams, M.D.
T. B. Triplett, M.D.

Adopted: October 12, 1950

PEDIATRICS COURSE SLATED

Three widely known speakers have been selected for the postgraduate course in pediatrics to be held at the University of Oklahoma School of Medicine December 4, 5, 6, 1950. They are Stuart S. Stevenson, M.D., Research Professor in Pediatrics, Children's Hospital, Pittsburgh, Pennsylvania; Archibald L. Hoyne, M.D., Chicago, Illinois; and James G. Hughes, M.D., (formerly O.S.M.A. postgraduate instructor) Memphis, Tennessee.

The course, which is sponsored by the Department of Pediatrics at the medical school, is a part of the postgraduate program at the University of Oklahoma School of Medicine. It is open to all physicians of Oklahoma who are interested in pediatrics. The course will be held in Crippled Children's Hospital, Oklahoma City, Oklahoma. Registration fee is \$15.00.

RESOLUTION

On September 14, 1950, one of our long-time members and an active worker of our County and State Association passed from this life to his eternal rest, after a very active life spent in the practice of our profession. He had spent about 45 years in active practice and in the relief of the ills of mankind. We, the members of Payne-Pawnee County Medical Society mourn the loss of Dr. L. A. Mitchell of Stillwater, Oklahoma.

Doctor Mitchell came to Payne County and located in Stillwater, Oklahoma, about the year 1925 and became associated with the A. and M. College as College Physician. After a short time, he opened an office in Stillwater for the private practice of medicine and remained in that status until the time of his death. He was actively engaged in carrying on in his work to within 48 hours of his passing. At the time of his death, he was Councilor of the Second District of the Oklahoma State Medical Association and was devoting a great deal of time in the fulfillment of the duties of his office.

He was an active member of the First Christian Church, member of the Lions Club of Stillwater and many civic clubs and organizations for the betterment of his town. He was a member of the Masonic Lodge and a 32nd degree member of the Consistory of the Valley of Guthrie. He was a past president of the Payne County Medical Society, a past president of Oklahoma State Tuberculosis Association. Doctor Mitchell was a Medical Officer in the United States Medical Corps during the first World War and served as part time medical examiner for selective service during World War II. He had been a member of the medical staff of Stillwater Municipal Hospital since it was opened in 1939 and had served as chief of staff at one time. He was a Fellow of the American Medical Association.

Doctor Mitchell will always be remembered by those who have known him and worked with him, as a man whose endeavor was to harmonize the differences between men. He wanted to do right as he saw the right and was willing to bear the burden and responsibilities of his thinking.

NOW THEREFORE BE IT RESOLVED by the members of the Payne-Pawnee County Medical Society that a copy of this resolution be sent to the State Medical Association, one to the News Press of Stillwater, Oklahoma, one to the members of his family and one retained for the files of the Payne Pawnee County Medical Society as of this date.

s/ Roy E. Waggoner, M.D.
H. C. Manning, M.D.
R. E. Leatherock, M.D.

COMMITTEE FOR PAYNE-PAWNEE
COUNTY MEDICAL SOCIETY

Approved: October 20, 1950


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MEDICAL SOCIETIES AROUND THE STATE

Northwestern

Northwestern Counties Medical Society held its regular bi-monthly meeting at Shattuck, Oklahoma, Thursday, October 12, 1950. Dinner was served to approximately 40 physicians, their wives, nurses and technicians by the ladies of the Methodist church. At the business and scientific meeting held in the library of the Shattuck, Dr. Cleve Beller and Dr. J. J. Coyle of the University of Oklahoma School of Medicine were special guests. Doctor Coyle spoke on "Ectopic Pregnancy". After the scientific program, the Auxiliary met with Mrs. M. C. England, President, Woodward, presiding. Physicians from Shattuck, Beaver, Mooreland, Woodward, Oklahoma City, Fort Supply and Canadian, Texas attended the meeting. Next meeting of the society will be December 14 at Fort Supply as guests of H. L. Johnson, M.D. and the staff of the Western State Hospital.

Payne-Pawnee

Physicians and Auxiliary members from the Payne-Pawnee County society met at Cushing recently. Preceding the meetings, dinner was served at the Cushing hospital. Plans were made for a Founders Day luncheon in Stillwater October 19.

Beckham-Custer

Robert Ansbaugh, M.D., associate professor of obstetrics and gynecology at the University of Oklahoma School of Medicine was guest speaker at a recent meeting of the Beckham-Custer County Medical Society.

Grady-Caddo

Members of the Caddo-Grady County Medical Society met recently in Chickasha with a joint meeting of the Auxiliary. Dick Graham, O.S.M.A. Executive Secretary, spoke to the Society about the Annual Meeting in May and addressed the Auxiliary on "Voluntary Health Insurance Programs".

Atoka-Bryan-Coal-Johnston

A movie entitled "The Christopher Movement" was shown when the Atoka-Bryan-Coal-Johnston Medical,

Dental and Pharmaceutical Society met in Durant recently. The Auxiliary members were guests of the Society at a dinner preceding the business meeting.

Tulsa County

Charles E. Dunlap, M.D., head of the department of pathology at Tulane University School of Medicine, New Orleans, was guest speaker at a meeting of the Tulsa County Medical Society October 28. Doctor Dunlap discussed "The Diagnostic Value of Biopsies".

Garfield-Kingfisher

The October meeting of the Garfield-Kingfisher County Medical Society was held in conjunction with the post-graduate course in dermatology held in Enid October 26.

Pottawatomie County

"Treatment of Burns" was the topic L. D. Combs, M.D., spoke on at the meeting of the Pottawatomie County Medical Society meeting October 18, 1950. K. W. Navin, M.D., was the discussion leader. The meeting was a dinner meeting held in the Haviland Room, Aldridge Hotel, Shawnee.

Oklahoma County

The regular meeting of the Oklahoma County Medical Society was held in the Civic Room of the Biltmore Hotel October 30 honoring Elmer L. Henderson, M.D., President of the American Medical Association, who was one of the guest speakers at the Oklahoma City Clinical Society.

Pittsburg County Society

The Pittsburg County Medical Society had a dinner meeting October 20 at Pete's Place in Krebs. There were 20 members and guests present. A. R. Sugg, M.D., Ada, Speaker of the House of Delegates, presented a Life Certificate to Will C. Wait, M.D., McAlester. The Society charter was also presented at the meeting. John Hart, Associate Executive Secretary, attended the meeting from the executive office.

ANNOUNCEMENTS

AMERICAN MEDICAL INTERIM SESSION. December 5-8, 1950. Cleveland, Ohio.

AMERICAN COLLEGE OF PHYSICIANS. Thirty-second annual session, April 9-13, 1951, St. Louis, Missouri.

RADIOLOGICAL SOCIETY OF NORTH AMERICA. Thirty-sixth annual meeting. Chicago, Palmer House, December 10-15, 1950.

INSTITUTE OF INDUSTRIAL HEALTH. University of Cincinnati Institute of Industrial Health will accept applications for a limited number of fellowships which are being offered to qualified candidates who wish to pursue a graduate course of instruction which will qualify them for the practice of industrial medicine.

POSTGRADUATE COURSE IN PEDIATRICS. University of Oklahoma School of Medicine will offer a pediatrics postgraduate course December 4, 5, and 6, 1950.

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BOOK

SCIENTIFIC PRINCIPLES IN NURSING. M. Esther McClain, R.N., B.S., M.S. Illustrated. Pp. 410. St. Louis, C. V. Mosby Company. Price \$3.00.

To correlate basic scientific principles to good nursing procedures has been the main purpose of Miss McClain's book. She has successfully shown that scientific facts intelligently applied form the foundation of the best nursing methods. Techniques or procedures are not described in detail, and they are discussed only in their relationship to basic scientific facts.

Closely interwoven with nursing and playing important roles in nursing treatments are the elements of the physical and biological sciences, the medical sciences, and the social sciences. Just what these elements are and how they effect specific operations compose the major part of the book. Procedures from every phase of nursing — the provision of comfort for the patient, treatments for diseases of all parts of the body, satisfaction of the physical needs of the patient, responsibility to the patient, his family, the physician, and the hospital — are all explained in their relation to scientific rules. The usual treatment of each topic includes a general introduction which is followed by a discussion of the relevant principles of anatomy and physiology, microbiology, chemistry, pharmacology, physics, psychology, and sociology. The main point which the author emphasizes throughout the book is the importance in the individual nurse's understanding of the basic principles which lie behind her methods — in her own words, "Principles provide a safe guide for performance. If the principles are well understood and applied, the method is a good one."

The material which is presented in a clear and concise manner falls naturally into five units. The first unit, essentially an introductory discussion designed to orient the beginning student to hospital nursing, explains much concerning personal and public health and hospital environments. The next unit describes the place which the sciences occupy in the policies and practices of admission and dismissal in the hospital, the value of thoughtful, intelligent observations of the nursing staff, and the nurse's care of the dying and the dead. The third unit, dealing especially with the needs of the patient, includes informative discussions on food and its service, care of the hair, the mouth, skin, and nails, elimination and treatments of the bladder and large intestine, and the art of bedmaking, all as founded on scientific principles. Unit IV is concerned with diagnostic measures in which the temperature, the pulse rate and blood pressure, respiration, and the principles of laboratory tests are investigated through application of scientific theories with explanations of the abnormalities usually encountered. The final and largest unit describes the dependency on basic science of nursing methods in the treatment of afflictions in the various parts of the body. Incorporated here also are the basic principles of needle injections, care of wounds and bandaging, radiation, and oral medication.

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REVIEWS

the several paragraphs at the end of each chapter which discuss learning situations for the patient and offer suggestions to aid the nurse in instructing the patient in the methods of regaining and maintaining his health with the suggested performance check lists for judging procedures. Included, also, for the use of the instructor are groups of exercises.

Miss McClain has given this material a complete and totally new presentation, bringing up-to-date a subject which should be of interest to student and graduate nurses, and to clinical and nursing instructors alike. The book contains much of value for all.—Sister M. Paneratia, R.N., B.A., Associate Director of Nurses, St. Anthony Hospital, Oklahoma City, Oklahoma.

SAW-GE-MAH (Medicine Man). Louis J. Gariepy, M.D. First edition. Northland Press. 1950. Price \$3.00.

This is a novel which tells the story of the life of one doctor of medicine against a background of the years from 1900 to 1950. SAW-GE-MAH is the Ottawa tongue for Medicine Man, the title given Hal Adams, M.D., by the Indians of the upper Michigan lumber mill country where he lived as a boy and returned to practice after his education at University of Michigan.

The story of Doctor Adams is not unique — humble beginnings, struggling years as a medical student, the difficulties of establishing his practice, advancement as a surgeon, recognition and honors in his later years. Love interest is included, and even a villain as dastardly as the made-in-Hollywood variety.

Such a story could easily be made into a commonplace novel. SAW-GE-MAH is not. Doctor Gariepy writes with skill, sustaining the reader's interest.

Without digressing from the story of Doctor Adams, the book outlines the tremendous changes in the science of medicine and the effects of these changes on the way in which medicine was practiced during the half century that was Doctor Adams lifetime. It develops in the easily understandable terms of how such changes affected one physician, some of the problems facing the medical profession today. This presents these problems in a new light to the lay reader.

The presentation of such questions as the need for expanded medical teaching facilities, both undergraduate and postgraduate, the important role of the general practitioner, and the dangers inherent in overspecialization is both thoughtful and authoritative. Only on the subject of group practice does one feel that the book speaks with prejudice, for group practice is the "happy ending" of the book, offered as a panacea for the problems of increasing specialization and the economic ills of the profession.

One wonders if SAW-GE-MAH is not at least partly autobiographical, for its author, like the central character, has been a general practitioner, a specialist in surgery and an organizer of a well known group medical practice.—Jean Baugh (Mrs. Howard T. Baugh, Jr.)

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D. P. Richardson, M.D., Union City, oldest living banker in Oklahoma and oldest member of the lodge, was honored at a meeting of the Elks Club in El Reno.

Robert Meirs, M.D., Sayre, attended a medical meeting in Kansas City, Missouri in October.

Mack I. Shanholtz, M.D., Wewoka, spoke on "Our Medical Progress" at the Holdenville Rotary Club meeting recently.

Charles F. Moore, M.D., who has been on an extended trip to South and Central America, has re-opened his office in Durant.

O. E. Templin, M.D., Alva, was recently featured in his home town newspaper as one of Alva's leading business and professional leaders.

Wallace Byrd, M.D., Coalgate, is the new county superintendent of health in Coal County.

O. L. Grigsby, M.D., Nowata, is president of the Nowata Lions Club.

H. C. Brown, M.D., *John H. Mogab, M.D.*, and *W. P. Lawton, M.D.*, have all been featured recently in the "Know Your Neighbor" column in their home town paper at El Reno.

J. B. Clark, M.D., Coalgate, and his nurse, *Teresa Cometti*, were presented wrist watches recently by the people of their community in appreciation for their services.

J. E. Childers, M.D., has re-opened his clinic at Tipton after spending the past few months in Alabama.

Floyd Bartheld, M.D., McAlester, attended the American College of Surgeons and the clinics at Johns Hopkins in October.

J. B. Hollis, M.D., Mangum, attended the National American Legion convention in Los Angeles.

V. M. Rutherford, M.D., Midwest City, recently took the postgraduate course in general surgery at the Cook County Graduate School of Medicine, Chicago.

H. W. Larkin's M.D. son, *Bright Larkin*, is now chief medical officer of the USS Oriskany.

ANNUAL CLINICAL CONFERENCE

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1. Bauer, G.: *Angiology* 1: 161-169 (Apr.) 1950.

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KEY TO ABBREVIATIONS

(S)—Scientific Article
(E)—Editorial
(SA)—Special Article
(A)—Announcements
(BR)—Book Reviews
(TC)—Therapeutic Conference

(ABS)—Abstract
(O)—Obituary
(PIC)—Picture
(GN)—General News
(CPC)—Clinical Pathologic Conference

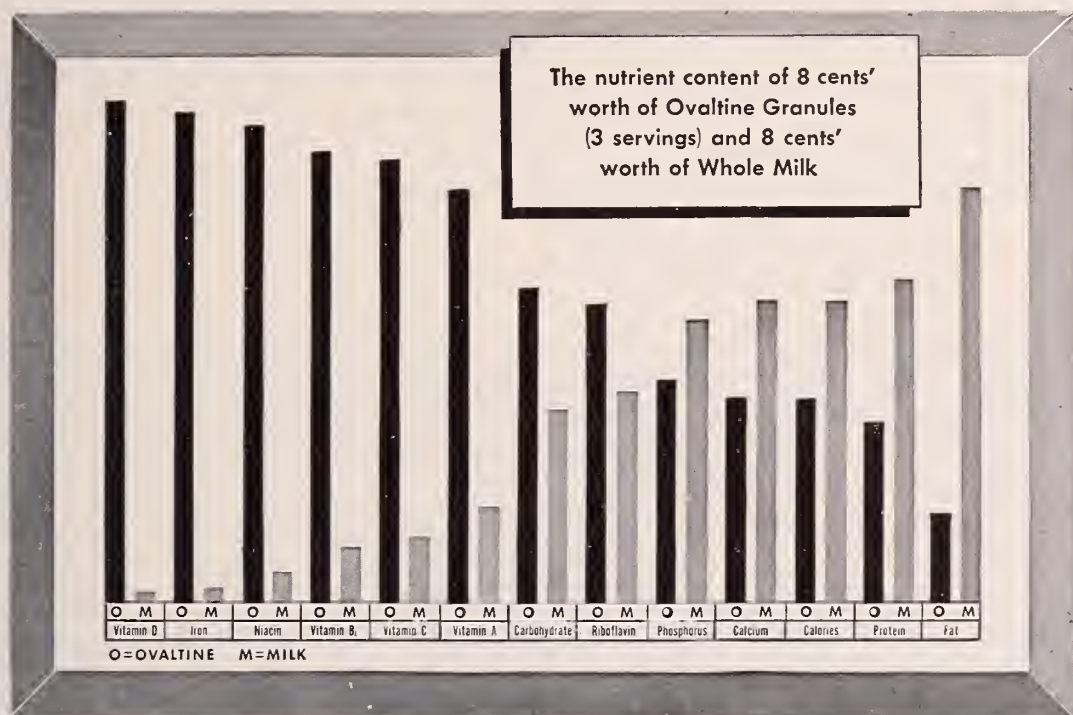
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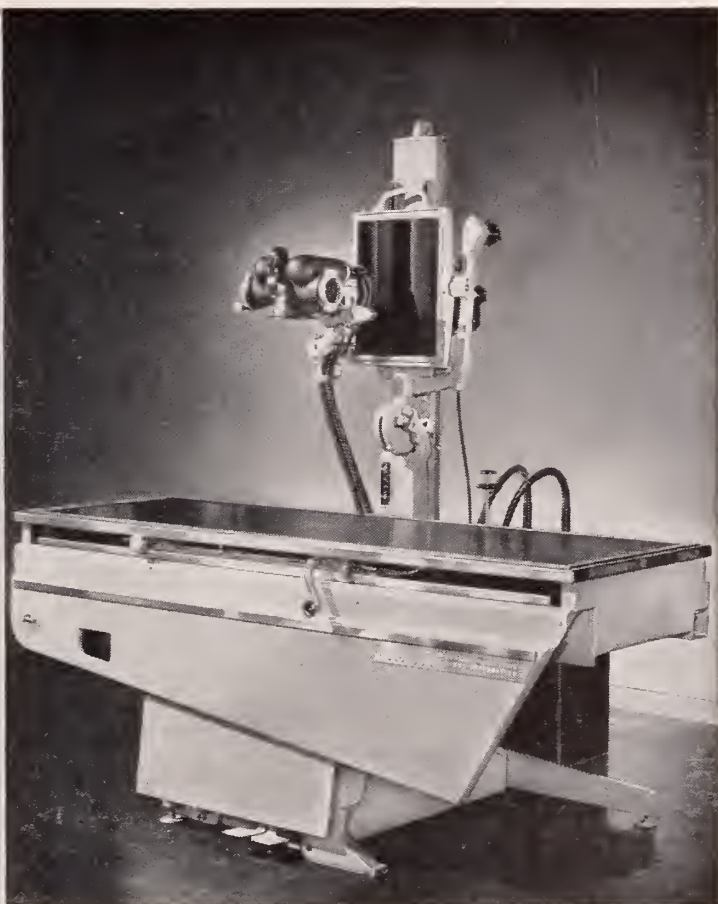
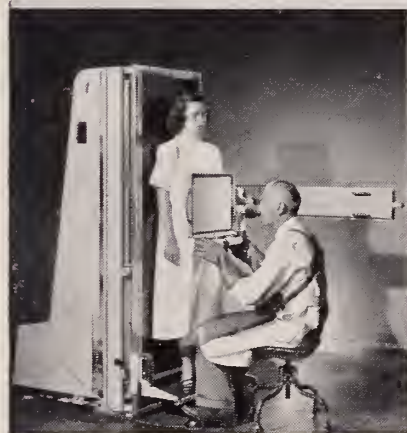
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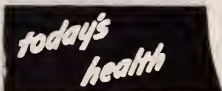
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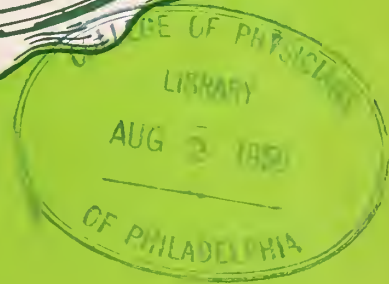
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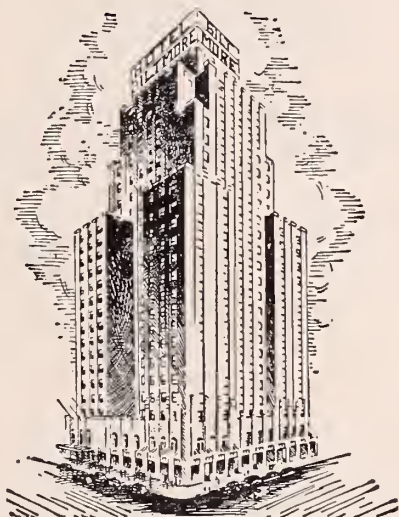
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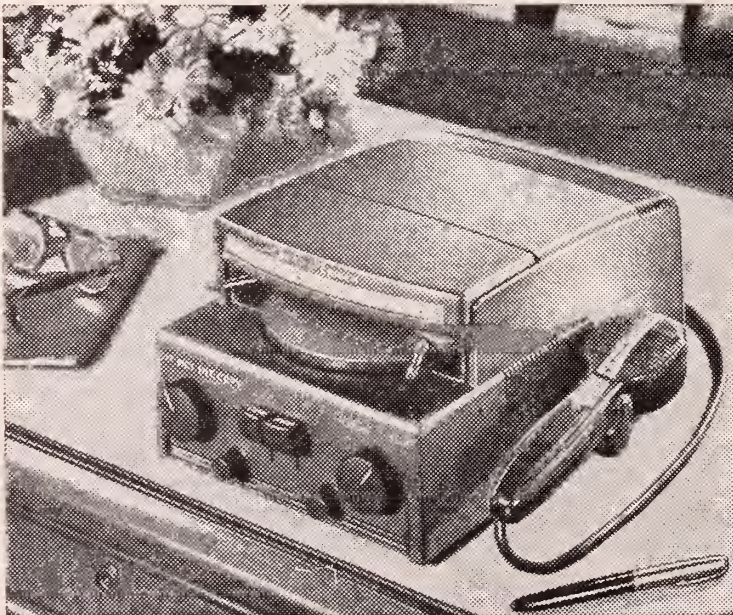
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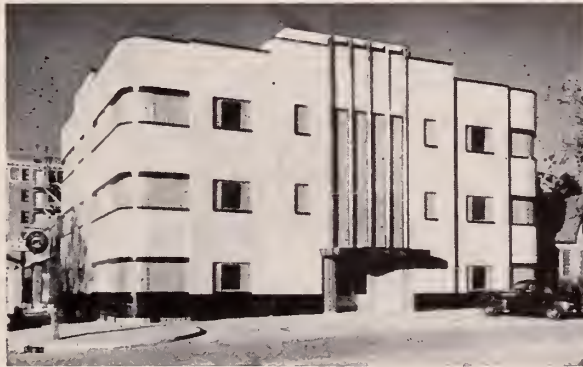
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1950

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Published Under the Direction of the Editorial Board and the Council

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The JOURNAL of The OKLAHOMA STATE MEDICAL ASSOCIATION

OKLAHOMA CITY, OKLAHOMA



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INTRODUCTION

The 1950 Directory is the third edition of this publication in its present general form.

An attempt has been made to assemble in one handbook information of a non-scientific nature which will be helpful to the members of the association in their day to day practice.

The rosters contained in the Directory are based on the records of the Association and of the State Board of Medical Examiners as of December 31, 1949. No effort has been spared in striving for the maximum degree of accuracy in spite of constant changes in status which render that task exceedingly difficult.

As in past editions, medical laws, and regulations of the State Board of Medical Examiners have not been included in the Directory since these are published by the board.

Financing of the Directory has been entirely through the sale of its advertising. You are encouraged to patronize these advertisers whose cooperation has made this publication possible.

OKLAHOMA STATE MEDICAL ASSOCIATION

Like the state of Oklahoma the Oklahoma State Medical Association was formed by the amalgamation of organizations established earlier in the Indian and Oklahoma Territories.

The very early history of the two parent organizations is lost in the shades of the past and even the earliest records in existence depend for much of the memory of the medical leaders of those early times.

"The Oklahoma Medical Journal", a privately published forerunner of the present Journal, was founded in 1893 and the first edition was published January 15 of that year.

The new Journal immediately set about the task of perfecting the organization of an Oklahoma territorial medical association and that effort was effective at a meeting called through the Journal, May 9, 1893, in Oklahoma City. From that time until May 1905 the organization met twice a year.

The Indian Territory Medical Association according to the best information available was organized in Muskogee in May 1889 and remained active until it was joined with The Oklahoma State Medical Association though the records for the intervening years are incomplete.

Fortunately, a bound volume, "Transactions of the Joint Session of the Oklahoma State Medical Association with the Indian Territory Medical Association," held in Oklahoma City May 7th, 8th and 9th has been preserved and contains a most interesting account of the sessions of the house of delegates which approved the report of a joint commission which met in Oklahoma City, July 12, 1905 and as a result of its deliberations recommended the amalgamation of the two groups.

On May 8, 1906, the amalgamation was formally effected by the adoption of a Constitution and By-Laws declaring "The Oklahoma State Medical Association and Indian Territory Medical Association one, under the name of "The Oklahoma State Medical Association."

The first edition of the "Journal of the Oklahoma State Medical Association" was published in June, 1908 as authorized by the house of delegates at Shawnee in May 1907.

The Oklahoma State Medical Association had been incorporated under the laws of the Territory of Oklahoma July 31, 1905 prior to the amalgamation with the Indian Territory Association and the charter issued at that time is still in effect.

Since that time the records are complete and reveal a story of medical advancement and achievement which has indeed kept pace with the lusty progress of a new and growing state.

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Jefferson.....	Phillip Kouri, Ryan	John B. Jacob, Waurika	Second Monday
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Pittsburg.....	William P. Lerblance, Jr., Hartshorne	H. C. Wheeler, McAlester	Third Friday
Pontotoc-Murray.....	E. R. Muntz, Ada	C. P. Taylor, Jr., Ada	1st and 3rd Wed.
Pottawatomie.....	C. C. Young, Shawnee	Clinton Gallaher, Shawnee	Third Wednesday
Rogers-Mayes.....	Paul B. Cameron, Pryor	P. S. Anderson, Claremore	Third Wednesday
Seminole.....	J. D. Wood, Seminole	Mack Shanholtz, Wewoka	Third Wednesday
Stephens.....	W. R. Cheatwood, Duncan	Fred W. Taylor, Duncan	Third Wednesday
Texas.....	G. A. Hopkins, Guymon	W. N. Oxley, Texhoma	
Tillman.....	J. E. Arrington, Frederick	O. G. Bacon, Frederick	
Tulsa.....	Fred E. Woodson, Tulsa	John G. Matt, Tulsa	Second and Fourth Monday
		Mr. Jack Spears, Exec. Secty.	
Washington Nowata.....	R. C. Gentry, Bartlesville	R. J. Bogan, Bartlesville	
Woods.....	D. B. Ensor, Hopeton	W. F. LaFon, Alva	2nd Wed. Odd Months

STATE BOARD OF HEALTH

Grady F. Mathews, M.D., Oklahoma City.

(Number after name indicates years to be served.)

Arnold Schwallisch, Engineer, El Reno (9); M. L. Whitney, M.D., Okemah (8); C. R. Rountree, M.D., Oklahoma City (7); Bert Loy, Hospital Administrator, Oklahoma City (5); A. G. Reed, D.O., Tulsa (4); Charles Ed White, M.D., Muskogee (3); Otto Whiteneck, D.D.S., Enid (2); T. H. McCarley, M.D., McAlester (9); Roy L. Fisher, M.D., Frederick (4).

STATE BOARD OF MEDICAL EXAMINERS

H. C. Weber, M.D., Bartlesville, President; Clinton Gallaher, M.D., Shawnee, Secretary; R. B. Gibson, M.D., Ponca City; Hugh H. Monroe, M.D., Pauls Valley; Everett G. King, M.D., Duncan; O. C. Newman, M.D., Shattuck; and John C. Perry, M.D., Tulsa.

COMMITTEE ON STANDARDIZATION

(As approved by the Crippled Children Act)

Earl D. McBride, M.D., Chairman, 605 N. W. 10th St., Oklahoma City.

I. F. Stephenson, M.D., Alva, Vice-Chairman.
Joe N. Hamilton, Secretary, 805 Midwest Bldg., Oklahoma City.

J. F. Park, M.D., McAlester; Floyd Newman, M.D., Shattuck; E. Eugene Rice, M.D., Shawnee, and M. M. Williams, D.D.S., Chickasha.

REGIONAL DIRECTORS AMERICAN CANCER SOCIETY

(Representing Kansas, Missouri, Arkansas, Oklahoma, Texas)

C. C. Nesselrode, M.D., Kansas City, Missouri.

Everett S. Lain, M.D., Oklahoma City.

Executive Director

J. R. B. Branch, M.D., Commerce Exchange Bldg., Oklahoma City, Okla.

OKLAHOMA STATE MEDICAL ASSOCIATION CONSTITUTION AND BY-LAWS

CONSTITUTION

ARTICLE I Title

The name of this organization is the OKLAHOMA STATE MEDICAL ASSOCIATION, INCORPORATED.

ARTICLE II Purpose of the Association

This Association is formed to promote the science and art of medicine.

ARTICLE III Component Societies

The membership of the Association shall be organized into county medical societies and/or district medical societies, as circumstances may direct and as the Association may determine. The name and function of each such society and its relations to the Association shall be defined in a charter issued by the Association, subject to amendment and revocation by the Association in accordance with such terms as may be prescribed in the By Laws of the Association.

ARTICLE IV Membership

Membership in this Association shall be considered a privilege and not a right. The membership of this Association shall be comprised of all members in good standing of its component societies as indicated by the membership records of the Association.

ARTICLE V House of Delegates

Section 1. The House of Delegates shall be composed of: (1) Delegates elected by the component county and/or district societies of the Association, (2) The officers of the Association enumerated in ARTICLE VIII, Section 1, of this Constitution, and (3) The Oklahoma Delegates to the American Medical Association.

Section 2. All legislative powers of the Association reside in the House of Delegates which alone shall have authority to determine the policies of the Association. The House of Delegates shall transact all business of the Association, directly or through agencies or agents created by it, the transaction of which is not vested by this Constitution in any other agency. The House of Delegates shall elect the general officers of the Association.

Section 3. The House of Delegates shall provide for a division of the scientific work of the Association into such sections or departments as, in the judgment of the House, will best promote the scientific and professional activities of the Association.

Section 4. The House of Delegates may provide for the organization of such Councilor District Societies as, in its judgment, will promote the best interests of the profession, but the membership of any such society shall be limited to members of the component county societies of which it is made up.

Section 5. The House of Delegates shall divide the state into Councilor Districts specifying which county or counties shall be in each district.

ARTICLE VI The Council

Section 1. The Council shall consist of one Councilor elected from each Councilor District, the President, President-Elect, Secretary-Treasurer and Speaker of the House of Delegates of the Association.

Section 2. The Council shall be the Executive Board of this Association and shall carry out the mandates and policies of the Association which are determined by the House of Delegates. The Council shall have supervision and control of the finances and particularly the expenditures of the Association, the investment of its funds and the direction and control of its property.

Section 3. The Council shall meet at least once during the annual session, and on call by the President

between annual sessions of the Association on his own initiative or by petition to the President by at least one-third of the members of the Council.

ARTICLE VII Sessions and Meetings

Section 1. The Association shall hold an annual session at such a place as shall be determined by the House of Delegates. For good and sufficient reason, the annual meeting place may be changed by a three-fourths vote of the Council.

Section 2. During the annual session there shall be held (1) at least one general meeting open to all registered members and guests, (2) at least one meeting of the House of Delegates, and (3) at least one meeting of the Council.

Section 3. The Council, by a vote of two-thirds of its entire membership may call a special meeting of the House of Delegates, and upon petition by thirty (30) or more delegates, the Speaker of the House of Delegates or the President of the Association shall call such a meeting. At any such meeting, no business shall be transacted except that specified in the call.

ARTICLE VIII General Officers

Section 1. The general officers of the Association shall be President, President-Elect, Vice President, Secretary-Treasurer, Speaker and Vice-Speaker of the House of Delegates, and the number of Councilors and Vice-Councilors as fixed by the House of Delegates.

Section 2. The President-Elect and Vice President shall be elected for a term of one year; the Secretary-Treasurer, Speaker of the House of Delegates and Vice-Speaker of the House of Delegates for two years; and the Councilors and Vice-Councilors for three years, the Councilors being divided into classes so that approximately one-third of the Councilors shall be elected each year. The President-Elect shall become President for a term of one year upon the expiration of his term as President-Elect.

Section 3. All of the above officers shall assume the duties of their respective offices immediately upon the close of the annual session at which they were elected to serve and shall serve until their successors have been elected and installed.

Section 4. Vacancies created by the death, resignation, or removal of the above named officers shall be filled by temporary appointment by the President being effective until the next annual meeting of the House of Delegates which shall elect a successor to complete the unexpired term, if any, except the President, whose place shall be filled by the Vice-President, and the Speaker of the House of Delegates, whose unexpired term shall be filled by the Vice-Speaker and Councilors, whose terms shall be completed by their respective Vice-Councilors.

ARTICLE IX Finances

Section 1. Funds for conducting the affairs of the Association may be raised (1) by such special assessments on and/or annual dues from members of this Association as the House of Delegates determines advisable, provided that such assessments and dues, with respect to its members, shall be collected by each component county and/or district society and forwarded by its secretary to this Association, (2) by voluntary contributions requested by resolution, and (3) in any other manner approved by the House of Delegates.

Section 2. The Council shall, at the annual session, submit a budget to the House of Delegates for its approval, detailing the financial needs of the Association for the ensuing year. The House of Delegates, if it approves the budget, shall make such appropriations as are called for therein.

ARTICLE X Referendum

Section 1. At any session of the House of Delegates, the House may, by a two-thirds vote of its registered members, submit any question to the membership of the Association for its vote. A majority vote of all the members of the Association shall determine the question.

Section 2. The Council shall be in charge of the referendum and may designate an officer of the Association or a Committee to canvass the vote and announce the results.

ARTICLE XI Seal

The Association shall have a common seal. The power to change or renew the seal shall rest with the House of Delegates.

ARTICLE XII Ethics

The Principles of Medical Ethics of the American Medical Association in force at the time of the adoption of this Constitution, and as they may from time to time be thereafter amended by the American Med-

ical Association, shall be accepted as the Principles of Medical Ethics of the Oklahoma State Medical Association and shall be binding on its members and on its component county and/or district societies.

ARTICLE XIII Amendments

The House of Delegates may amend any article of this Constitution or any section or part thereof by a two-thirds vote of the Delegates registered at any Annual Session, provided that copies of the proposed amendment be sent with notices to the various component societies at least sixty (60) days before the Annual Meeting, and that the proposed amendments be published at least once during the year in the Journal, and that no such amendments become effective until the close of the Annual Session.

ARTICLE XIV

This Constitution supersedes and repeals all previous Constitutions. All By-Laws, resolutions and enactments in conflict herewith are declared to be of no effect.

(Constitution Adopted 1940)
(As Amended Through 1949)

BY-LAWS

CHAPTER I—Membership

Section 1. Eligibility

All members in good standing of the component societies of this Association, as indicated by the membership records of this Association, are members of this Association. However, a component society shall admit to membership only such a person as is a citizen of the United States, possesses the degree of Doctor of Medicine or a foreign degree in medicine regarded by the Council of this Association as equivalent thereto, and in addition, has been licensed to practice medicine and surgery by the Oklahoma State Board of Medical Examiners.

(a) Any physician who is associated with the Armed Forces, Veterans Administration, or the United States Public Health Service and who does not possess a license to practice medicine in the State of Oklahoma but who otherwise meets the qualifications for membership may be elected to membership by a County Medical Society, but may not hold office or be a member of the House of Delegates.

Section 2. Rights

(a) Only members of this Association who are in good standing will be entitled to any of the rights, benefits and privileges of the Association, including the right to register at the annual session of the Association. The presence of a physician's name on the official roster of the Association, after it has been properly reported to the Executive Secretary of this Association by the Secretary of his county and/or district society, shall be prima facie evidence of membership, good standing, and the right to register at an annual session. No member shall take part in any of the proceedings of the annual session until he has registered.

(b) All members of the component county and/or district societies, in good standing and whose dues and assessments in this Association have been received from their component societies, are active members. Only active members are entitled to hold an office in this Association.

(c) Each Councilor District shall have one Councilor and one Vice-Councilor, however, only one vote in the Council will be apportioned to each Councilor District. The Vice-Councilor may vote in the absence of the Councilor without a proxy from the Councilor.

Section 3. Classification

Members of this Association shall be divided into the following classes: active members, life members, honorary members, junior members, associate members, and special service members.

(a) Active Members

Active members shall include all eligible members

of component county and/or district societies, providing that their dues and assessments in this Association have been received from component societies.

(b) Honorary Members

Any physician, a member of this Association, who by reason of ill health or age shall retire from the active practice of medicine, and whose service to humanity and his profession has been so unusually outstanding as to merit honorary recognition may be placed on the Honorary Membership roll. Eligibility for such consideration is limited to those physicians who have been members of this Association not less than five years immediately preceding application and whose petition for such membership is initiated by a component society of this Association, presented for consideration to the Executive Secretary not less than three months before the next annual session and whose names shall have been published in the Journal issued immediately preceding the annual session. Provided, however, that any former member of the Association, who, at the time his membership lapsed, had been an active member of the Association for five (5) years and who possesses the other qualifications for Honorary Membership, shall be eligible for election to Honorary Membership on presentation of his petition by the component society of the county in which he resides, if the petition for such physician is presented to the Executive Secretary before January 1, 1950. After the 1950 Annual session, Honorary Membership shall not be available under the terms of this proviso.

The approval of the House of Delegates, by a majority vote thereof at the annual session, shall be necessary to place such eligible members on the Honorary Membership roll. Such members shall have all the privileges of active membership except holding office, and shall not be required to pay dues or assessments in this Association. Honorary Members shall be considered the same as fully-paid members in computing the membership of the County Societies for the purpose of determining the number of Delegates that the County Societies shall be entitled to send to the House of Delegates as provided in these By-Laws.

(c) Life Members

Any physician, a member of this Association who by reason of ill health or age shall retire from the active practice of medicine and who the County Society believes does not fall in the category to be considered as an Honorary Member (or who is, in the judgment of his County Medical Society, impaired by reason of physical disability or age from conducting a sufficiently active practice to pay dues and assessments, without undue hardship) may be placed on the Life Membership roll. Eligibility for such consideration is limited

to those physicians who have been members of this Association for not less than the preceding five years and whose petition for such membership is initiated by a component society of this Association, presented for consideration to the Executive Secretary not less than three months before the next annual session, and whose names shall have been published in the Journal issued immediately preceding the annual session. Provided, however, that any former member of the Association, who at the time his membership lapsed, had been an active member of the Association for five (5) years, and who possesses the other qualifications for Life Membership, shall be eligible for election to Life Membership on presentation of his petition by the component society of the county in which he resides, if the petition for such physician is presented to the Executive Secretary before January 1, 1950. After the 1950 Annual Session, Life Membership shall not be available under the terms of this proviso.

The approval of the House of Delegates, by a majority vote thereof at the annual session, shall be necessary to place such eligible members on the Life Membership roll. Such members shall have all the privileges of active membership except holding office, and shall not be required to pay dues or assessments in this Association. Life Members shall be considered the same as fully-paid members in computing the membership of the County Societies for the purpose of determining the number of Delegates that the County Societies shall be entitled to send to the House of Delegates as provided in these By-Laws.

(d) Junior Members

Physicians serving as interns or residents on full time shall be entitled to Junior Membership in the component county and/or district societies, and in this Association. No dues shall be assessed such members and they shall be entitled to all privileges of membership except holding office. Privilege of holding Junior Membership in this Association shall be limited to the period of hospital training. Such memberships shall not be considered in the computation of the number of delegates to which a component society is entitled.

(e) Associate Members

The House of Delegates may elect to Associate Membership any person who cannot qualify for either active, Life, Honorary or Junior Membership, if in the majority opinion of the House of Delegates, his contributions to medicine or the Association justifies the conferring of such an honor. Any County Society may place before the House of Delegates petitions for Associate Membership, after having first submitted the petition to the Council at least ninety (90) days before the Annual Meeting and receiving Council approval of the petition.

Petitions for Associate Membership may also originate in the Council, however, in all instances, all petitions for Associate Membership must be published in the issue of the Journal published at least thirty (30) days before the Annual Meeting.

(f) Special Service Members

Any physician who is in the Armed Forces of the United States, who has been licensed to practice medicine and surgery in Oklahoma, and who has not previously been a member of any county medical society may be recognized as a Special Service Member by this Association. Such physician shall first have been elected to membership as a Special Service Member by a component county society in accordance with the provisions of its Constitution and By-Laws, and the fact of such membership certified to the Executive Secretary of the Association. Special Service membership shall include all rights and privileges of Active Membership except voting and holding office.

No dues shall be assessed such member until the month following his discharge from the Armed Forces of the United States and at which time he shall pay prorated dues for the balance of the calendar year following his discharge from active service. Special Service membership shall lapse at the close of the calendar year following the discharge of each such member from service with the Armed Forces.

Section 4. Good Standing

A member who is under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its roll of members, whether as a result of disciplinary action or because of failure to pay dues, is not a member in good standing, within the meaning of this Chapter. This is true even though the defendant or expelled member or the member whose name has been dropped, has appealed to the Council of the Oklahoma State Medical Association for a review of such action, and his appeal has not yet been acted upon.

Section 5. Revocation of Honorary, Associate and Life Membership

Any Honorary, Associate or Life Membership may be revoked by a two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the Honorary or Associate Member violates any of the principles of the code of ethics of the Association, or whose conduct or actions are not becoming to the honor conferred.

Section 6. Application Clearance

Effective September 1, 1947 all Secretaries of County or District Medical Societies shall submit a copy of all applications for membership in the County or District Society to the Executive Office of the Association before final action on the application is taken. The Executive Office will, in turn, within three days, submit the information on said application to the Bureau of Investigations of the A.M.A. for clearance as to the applicant's past history and actions. The report of the Bureau of Investigations and any and all information on hand in the Executive Office shall, in turn, be forwarded within three days after receipt to the Secretary of the County or District Medical Society. The information contained therein will, in turn, be given to the Society's Board of Censors. The Executive Office of the Association shall not record any applicant's application on the records of the Association as a member in good standing unless the procedure outlined above shall have been accomplished. The Executive Office, however, shall have no right to question or decline applications that have followed this procedure if the County or District Society elects the applicant to membership at a regular meeting of the Society where in a quorum is present.

CHAPTER II—Annual Session

Section 1. Time and Place

(a) Sometime during the spring of each year, and prior to the Annual Meeting of the American Medical Association, this Association shall hold an annual session, the place to be determined by the House of Delegates, and the time to be designated by a committee composed of the President, President-Elect and Secretary-Treasurer of the Association.

(b) During the annual session, the House of Delegates and the Council shall meet, as hereinafter provided. A general meeting shall be held and the Scientific Assembly shall meet in such sections as may be determined by the Committee on Scientific Work with the approval of the Council.

Section 2. General Meeting

General meetings shall be open to all registered members, guests of the Association and may be open to the Public. At the general meeting the President-Elect, who succeeds to the Presidency, shall deliver the President's address in initiation of his incumbency.

Section 3. Scientific Assembly

The Scientific Assembly shall meet in such general and section sessions as may be determined by the Committee on Scientific Work with the approval of the Council.

(a) Section Officers shall be appointed by the Scientific Work Committee and confirmed or rejected by the Council.

Section 4. Papers

No paper shall be presented unless the title be in the hands of the Committee on Scientific Work at least thirty (30) days before the first day of the

Annual Meeting. No member may read more than one paper at any Annual Meeting except invited guests, and no paper or address shall occupy more than twenty (20) minutes in its delivery except special addresses by distinguished or invited guests on approval of the Committee on Scientific Work. No member, except by unanimous consent, shall speak more than once in the discussion of any paper nor longer than five minutes at any one time.

(a) Property of Papers

All papers read before this Association shall be its property, and immediately after being read, shall be deposited with the Secretary of the Section or the Executive Secretary of the Association. The authors of such papers shall agree that publication rights are reserved by the Association and except by consent of the Committee on Scientific Work, the authors shall not cause them to be published elsewhere until after they have been published in the Journal, providing, however, that if the Editorial Board of the Journal decides that the paper will not be published in the Journal that the Board may release the paper to the author, for such disposition as he may determine; provided further, that distinguished and invited guests delivering addresses or papers before the Association may reserve the right to use same as they may determine by previous arrangement with the Committee on Scientific Work.

CHAPTER III—House of Delegates

Section 1. Representation

Each component county and/or district society shall be entitled to send to the House of Delegates each year one delegate or one alternate to represent that Society in the House of Delegates for each twenty-five (25) fully-paid, Honorary and Life members, or any fraction thereof, in this Association. The delegates and alternates so elected shall assume office thirty (30) days prior to the next Annual Meeting and the list of delegates and alternates shall be published in the Journal of the Association issued the month previous to the Annual Meeting; provided, however, that each county society shall be entitled to one delegate and one alternate; and further provided that the number of delegates to which each component society is entitled will be based on a roster of its fully-paid membership within thirty (30) days of the next annual session; and it is further specifically provided that the representation of district societies in the House of Delegates shall be apportioned on the basis of the individual counties comprising such district society, with each county in which five (5) or more members reside being entitled to at least one delegate. In case of counties having less than five members, their members shall be included in the total membership of the district society, and if the total membership is sufficient to entitle the district society to an additional delegate such additional delegate shall be elected by the district society at large.

Section 2. Meetings and Attendance

(a) Annual Meeting.

The House of Delegates shall meet annually at the time and place of the annual session.

(b) Special Meetings.

The House of Delegates may be called into and convene into special session only under the conditions provided in Article VII, Section 3, of the Constitution.

(c) Registered members at an annual session, and members in good standing present at a special meeting of the House of Delegates shall be permitted to attend such meetings but except with unanimous consent of the House, only members of committees shall have the privilege of the floor under the circumstances stated in Section 4, subsection (d) of this Chapter. By a majority vote of the House, an executive session may be declared, during which time only qualified delegates will be permitted to attend the meeting.

Section 3. Quorum

A majority of registered and qualified delegates of this Association shall constitute a quorum.

Section 4. Reference Committees

(a) The speaker of the House of Delegates shall appoint, from among its members, reference committees to which reports and resolutions may be referred as may expedite the business of the annual session. Such reference committees shall be limited to three members, and may include those on resolutions, annual reports, place of next annual meeting, tellers and judges of elections, and other such committees as may be expedient.

(b) Delegates to the American Medical Association. The House of Delegates shall elect delegates and alternates to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body. Such delegates or alternates shall attend the session of the American Medical Association. If a delegate or alternate to the House of Delegates of the American Medical Association dies, resigns, or fails to qualify, the president, with the approval of a majority of the Council, may select a delegate to serve until the next succeeding or annual session of the House of Delegates of this Association, at which time a successor shall be elected for the unexpired term. Delegates to the American Medical Association shall be elected for a period of two years. The term of each delegate shall begin January 1 following the annual meeting at which time he is elected.

(c) District Societies.

When, in its judgment, the best interests of the Association and the profession will be promoted, thereby, the House of Delegates may organize district societies in any of the councilor districts of which all members of the component societies forming a part thereof shall be members. Likewise, the House of Delegates may disassociate any County Society from a District Society upon petition by a County Society of a District Society.

(d) Committees.

The House of Delegates shall have authority to appoint committees, for special purposes and to authorize the appointment of such committees. Such committee members need not be members of the House of Delegates. They shall report to the House of Delegates and may be present and participate in the debate on the reports but shall not have the power to vote.

(e) Finance.

(1) The House of Delegates shall consider the annual budget of the expense of the Association submitted to it by the Council, and take such action as it deems necessary.

(2) The House of Delegates shall fix each year at the annual session the amount of the per capita dues which each component society and/or district is to collect from its members and transmit to the Association. The House may also, when it deems it necessary, impose a special assessment on each member of the Association, which likewise it is the duty of the affected component society to collect and transmit to the Association. The House may also accept voluntary contributions or donations for special purposes or the general fund.

Section 5. Order of Business

The following shall be the order of business of the opening and final sessions of the House of Delegates.

(a) Opening Session

(1) Call to order by the Speaker of the House, or the Vice-Speaker or other authorized officer in the absence of the Speaker.

(2) Report of the Credentials Committee, the qualifying of delegates to serve, and determination of the presence of a quorum.

(3) Consideration of minutes of the last session and such special sessions as may have been held succeeding the last annual session.

(4) Nomination of Officers

(5) Appointment of Reference Committees by the Speaker of the House of Delegates.

(6) Reports of Officers

(7) Reports of Standing Committees

(8) Reports of Special Committees

(9) Presentation of Amendments to the Constitution and/or By-Laws.

- (10) Submission of invitations for the next annual session.
- (11) Unfinished business.
- (12) Miscellaneous and new business.
- (13) Recess
- (b) Final Session
- (1) Roll Call
- (2) Consideration of unfinished business of the preceding session.
- (3) Reports of Reference Committees.
- (4) Miscellaneous and new business.
- (5) Final consideration of Amendments to By-Laws and further consideration of Amendments to the Constitution.
- (6) Election of President-Elect and other Officers whose elections are in order at the session about to be concluded.
- (7) Installation of Officers for the ensuing year.
- (8) Announcement of Committee appointments by the recently installed President. (President-Elect until this time.)
- (9) Unfinished business.
- (10) Final adjournment.

The order of business, above detailed, may be modified for any session by a majority of delegates present at that session.

Section 6. Memorials and Resolutions.

No memorial or resolution shall be issued in the name of the Oklahoma State Medical Association until it has been approved by the House of Delegates.

CHAPTER IV—Councilor Districts and Councilors

Section 1. Apportionment

The State of Oklahoma is divided into fourteen (14) Councilor Districts and the counties allotted to each of such districts are as follows:

- District No. 1: Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, Washington.
- District No. 2: Kay, Noble, Osage, Pawnee, Payne.
- District No. 3: Garfield, Grant, Kingfisher, Logan.
- District No. 4: Alfalfa, Beaver, Cimarron, Ellis, Harper, Major, Texas, Woods, Woodward.
- District No. 5: Beckham, Blaine, Canadian, Custer, Dewey, Roger Mills.
- District No. 6: Oklahoma.
- District No. 7: Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, Seminole.
- District No. 8: Tulsa.
- District No. 9: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner.
- District No. 10: Haskell, Hughes, Latimer, LeFlore, Pittsburg.
- District No. 11: Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha.
- District No. 12: Carter, Garvin, Johnston, Love, Marshall, McClain, Murray, Pontotoc.
- District No. 13: Caddo, Comanche, Cotton, Grady, Jefferson, Stephens.
- District No. 14: Greer, Harmon, Jackson, Kiowa, Tillman, Washita.

Section 2. Term of Councilors

(a) During the Annual session of 1949, Councilors and Vice-Councilors for the districts outlined in Section 1 of this Chapter shall be elected for the following terms:

- Districts 1, 4, 7, 10, and 13 for one (1) year.
- Districts 2, 5, 8, 11 and 14 for two (2) years.
- Districts 3, 6, 9 and 12 for three (3) years.

(b) The terms of office of all Councilors elected after the 1949 Annual Session shall be three (3) years and until their successors are elected and qualified. No Councilor elected after the 1949 Annual session shall be eligible to serve continuously for more than two (2) elective terms. Provided, however; (1) The one and two year elective terms provided for in (a) of this section shall not be considered in the application of this limitation; (2) Service as a Councilor by appointment for completion of an unexpired term shall not be considered in the application of this limitation; (3) This limitation shall apply only to continuous service; (4) Service as Vice-Councilor shall not be in-

cluded in the computation of service as Councilor under this limitation.

Section 3. Change of Districts

The House of Delegates, by vote of two-thirds of the delegates present at an Annual session, may change the composition of any one or more of the Councilor Districts.

CHAPTER V—Election of Officers

Section 1. Ballot

All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. If no nominee receives a majority of the votes cast on the first ballot, the nominee receiving the lowest number of votes on that ballot shall be dropped from the list and a new ballot taken. This procedure shall be continued until one of the nominees receives a majority of all votes cast, when he shall be declared elected. However, if there is only one nominee for an office, a majority vote, without ballot, shall elect.

Section 2. Nominations

Any member of the House of Delegates shall be permitted to place in nomination for any office, except as herein otherwise provided, the name of any active member of the Oklahoma State Medical Association in good standing. Nomination of officers, councilors and vice-councilors shall be made during the opening session of the House of Delegates as shown in Chapter III, Section 5, subsection 4 of these By-Laws.

Section 3. Time of Election

Election of officers shall be held at the second meeting of the House of Delegates as provided by Chapter III, Section 5, subsection (b) of these By-Laws.

Section 4. Installation

The President-Elect shall assume the duties of President at the close of the next annual session after his election. The delegates to the American Medical Association shall assume office on January 1 following their election. All other officers shall assume office at the close of the Annual session at which they are elected. The terms of office of all officers shall be as herein provided, or until their successors have been elected and qualified.

All retiring officers of this association shall promptly turn over to their successors all papers, records, books and equipment of their office immediately upon being succeeded.

Section 5. Nomination of Councilors

One Councilor and one Vice-Councilor is to be elected from each district as hereinbefore provided, however, the delegates from the districts hereinbefore provided shall nominate one or more candidates for councilors and vice-councilors in a district caucus at a recess of the House of Delegates just prior to the election of officers, and the one receiving the majority vote of the House of Delegates shall be the Councilor.

CHAPTER VI—Duties of Officers

Section 1. President

The President shall be a member of the Council, and shall be the Chairman and presiding officer thereof. He shall preside at all general meetings of this Association. He shall fill vacancies on Standing Committees and appoint such Special Committees as he deems advisable or under instruction from the Council. He shall be ex officio member of all committees he appoints. He shall be Chairman of the Council and perform such other duties as pertain to the principal administrative officer as custom and parliamentary usage may require. He shall be the acknowledged head and personal representative of the medical profession of the State during his term of office, and so far as practical, shall visit the districts of the State and assist the Councilors in building up county and/or district societies. Upon invitation of his successor to the presidency or of the Council, he may sit as a member of that body in an advisory capacity for one year succeeding his retirement. As Chairman of the Council, he shall have the right to cast his vote as a Councilor or reserve same to break a tie.

Section 2. Vice-President

In the event of death, resignation, removal from the State, or the disqualification or disability of the

President to continue with his duties, the Vice-President shall succeed to the Presidency to complete the unexpired term. In the absence of the President he shall act as Chairman of the Council and preside.

Section 3. President Elect

At the close of the next annual session following his election, he shall automatically succeed to the Presidency.

Section 4. Speaker of the House of Delegates

The Speaker of the House of Delegates shall be a member of the Council. He shall preside at all meetings of the House of Delegates when present, and in the absence of the Vice-Speaker, may designate any member of the House to preside for him temporarily. He shall appoint such Reference Committees as may be necessary to expedite the business of the annual session, and shall perform such duties as custom and parliamentary usage may require of the presiding officer. During the absence of the President and Vice-President or other cause of vacancy of the Presidency, the Speaker of the House shall act in the capacity of Acting President to complete the unexpired term, this in addition to his other duties as Speaker of the House of Delegates.

Section 5. Vice-Speaker of the House of Delegates

The Vice-Speaker shall preside at meetings of the House of Delegates in the absence of the Speaker of the House, and shall succeed to the Speakership in the event of death, resignation, or other cause creating a vacancy in the Speakership of the House of Delegates.

Section 6. Secretary-Treasurer

The Secretary-Treasurer shall be a member of the Council and shall keep the minutes of the proceedings of this body. As Treasurer, he shall give bond at the expense of the Association and in such an amount as may be required by the Council. He shall receive all funds for dues and assessments collected by the Executive Secretary as well as other receipts collected for advertising, bequests, donations and other sources of income, and obtain an accounting from the Executive Secretary concerning same. He shall deposit the funds collected in a depository approved by the Council, and shall disburse from such accounts expenses approved by the Council on a voucher, signed by the Executive Secretary and countersigned by the President. He shall present the Council and House of Delegates, annually, a report of receipts and expenditures and the state of the funds in his hands, and shall subject his accounts to such examination as the Council and House of Delegates may order. Investments of reserve funds shall be made by the Treasurer on order of the Council in United States Government bonds and be held by him in safe keeping, subject to the order of the Council. He may borrow money in the name of the Association, and may use as security, if necessary, property held by him in safe keeping, only on the order and authority of the Council.

Section 7. Executive Secretary

The Executive Secretary shall be an employee of the Oklahoma State Medical Association and need not be a physician or a member of the Association. He shall be employed by the Council which shall fix his term of employment and designate his salary. He shall attend all meetings of the House of Delegates and shall be the recording secretary of both the House of Delegates and the Council. When in executive session, the House of Delegates and/or the Council may, by a majority vote, permit his presence. He shall keep minutes of the proceedings of all sessions and shall be secretary of all committees of the Association when called upon and available, and assist them in the performance of their duties. He shall, under instruction from the Committee on Publicity, issue and send to lay publications such articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address, on invitation, lay organizations on subjects pertaining to individual or community health. He shall, whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for

special meetings. He shall, at all times hold himself in readiness to advise and aid, so far as practical, any and all officers and committees of the Association. He shall be custodian of all records, books and papers belonging to the Association, except such as properly belong to the Secretary-Treasurer, and shall keep account of and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Meeting and cooperate with the Credentials Committee in the preparation of a list of the elected and qualified delegates from the component societies. He shall, with the cooperation of the secretaries of the component societies, keep a register of all licensed physicians of the state and cooperate with the American Medical Association in maintaining a complete roster of membership and detailed information thereon. He shall report in writing, promptly, proceedings of the House of Delegates, Council, or important committees and any other matters of importance or significance which should be published, to the Editorial Board of the Journal for their approval for publication. He shall aid the Councilors in the organization and improvement of county and/or district societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committeemen of their appointment and duties. He shall employ such office assistants as may be ordered by the Council, and shall make an annual report to the Council and the House of Delegates. He shall supply each component society with necessary blanks for membership and annual reports. He shall keep an account with the Component societies charging against each society its assessments, collect same and promptly turn the funds over to the Secretary-Treasurer. Acting with the Committee on Scientific Work and the Editorial Board of the Journal, he shall issue all programs. He shall maintain an office in the capital city of the State, providing for such office space and at such expense as may be approved by the Council. His office shall be designated as the Official headquarters of the Association. Travel expense and other necessary expense in the conduct of his office and in performance of his duties, shall be submitted monthly to the President.

CHAPTER VII—The Council

Section 1. Meetings

(a) The Council shall hold regular meetings during the year. Such meetings to be every three months with one meeting held no later than 30 days prior to the date of the Annual Meeting at which time the budget of the Association will be considered.

(b) The Council shall meet at the call of the President or by petition to the president by a majority of the Council.

(c) The Council shall meet daily during the Annual Session.

(d) The Council shall meet on the last day of the Annual Meeting for the installation of newly elected members. They shall program the mandates and recommendations of the House of Delegates and pursue other duties as provided by the Constitution and By-Laws.

Section 2. Presiding Officer

The President of this Association shall be the Chairman and presiding officer of the Council, and, in his absence, the following officers in succession shall assume such duty: Vice-President, Speaker of the House, Vice-Speaker of the House, or President-Elect.

Section 3. Annual Reports

The Council, through its Chairman, shall make an annual report to the House of Delegates to be presented during the first meeting of the annual session.

Section 4. Individual Duties of Councilors

Each Councilor shall be organizer, peace maker and censor for his district. He shall visit each county in his district at least once each year for the purpose

of organizing compouent societies where none exist; keep in touch with the activities, and to aid in the betterment of the compouent societies of his district, and to inquire into the conditions of the profession and improve and increase the zeal of component societies and their members. He shall make an annual report of his activities, and with such recommendations as may be indicated, to be presented to the House of Delegates at the annual session or published in an issue of the Journal preceding the annual session.

Section 5. Collective Duties of Councilors

(a) The Council shall be the executive body of the House of Delegates and this Association, and between meetings shall exercise the powers conferred on the House of Delegates by this Constitution and By-Laws, providing that in the exercise of the interim powers thus conferred upon it, the Council shall take no action and consider no legislation contravening any general policy which shall have been adopted by the House of Delegates and which, at that time, is still in effect.

(b) The Council shall be the Board of Censors of the Association and shall consider all questions involving the privileges and standing of members, whether in relation to other members, to compouent societies, or to the Association as a whole. All questions of an ethical nature brought to the attention of the House of Delegates, the general meeting, or to officers of the Association shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies and all matters referred to the Council on appeal from component societies or from the individual councilors. Its decision in all cases involving questions regarding membership in this Association shall be final, except those matters involving jurisdiction of the Judicial Council or other appropriate body of the American Medical Association, which by right the member or component society may appeal to the American Medical Association. In such an event, the finality of the appeal shall be suspended until a decision has been received from the American Medical Association.

(c) The Council shall systematically endeavor to promote friendly intercourse among physicians of the same locality, as well as throughout the state, shall encourage postgraduate and research work as well as home study, and shall endeavor to have the results utilized and intelligently discussed in component societies; shall consider and advise as to the material interests of the profession and of the public in those important matters wherein it is dependent on the profession; and shall keep informed and advise concerning medical and public health legislation and diffuse popular information in relation thereto.

(d) The Council shall have authority to organize in the sparsely settled sections of the state the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from other classes of component societies and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided therein for county societies until such counties may be organized separately. It is further provided that where two or more counties are organized into one society, there shall be at least one vote in the House of Delegates from each county represented in such societies.

Section 6. Compouent Societies

(a) Each Component Society of this Association shall file a copy of its Constitution and By-Laws with the Executive Secretary.

(b) Charters shall be issued to county societies on application to and on approval of the Council and shall be signed by the President and Secretary-Treasurer of this Association. Upon recommendation of the Council, the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of the Constitution and By-Laws of this Association. No charter shall be issued to any component society unless the membership of such society is qualified under Chapter I, Sections 1 and 2, of these By-Laws. From the time of adoption of this amend-

ment it shall be mandatory for each component Society to secure a charter within six months.

Section 7. Employees and Headquarters

All employees of this Association, including the Executive Secretary, shall be selected or approved by the Council, which shall fix the length of employment, salaries and allowances. It shall approve the selection of headquarters of the Association at the state capital city by the Executive Secretary, approve assistants employed by him and determine or approve the expense involving same.

Section 8. Committee on Appropriations and Auditing

ing.

The Council shall prescribe the methods of accounting and, through a committee of three of its members to be known as a Committee on Appropriations and Auditing, shall audit all accounts of this Association and receive reports for its approval or rejection. It shall adopt an annual budget providing for the necessary expenses of the Association, which shall be prepared and presented for approval by the House of Delegates.

Section 9. Salaries

Salaries of all employees of the Association shall be fixed by the Council.

Section 10. Exhibits

Exhibits at annual meetings, arranged for by the Executive Secretary, shall be approved and authorized by the Council. No article or compound shall be allowed among the exhibits which is held unethical or improper by the Council on Pharmacy and Chemistry, Council on Physical Therapy, Council on Foods, and the Bureau of Exhibits of the American Medical Association.

Section 11. Editorial Board

The Council shall select members of the Editorial Board of the Journal of the Oklahoma State Medical Association, herein referred to as the Journal, as provided for in Chapter VIII of these By-Laws.

Section 12. Journal

Upon the recommendation of the Editorial Board and the Executive Secretary, the Council shall authorize the issuance of the Journal and provide necessary appropriations for the publication of the same. It shall have final jurisdiction in the matter of policy and in regulating the activities and authority of the Editorial Board and Executive Secretary.

CHAPTER VIII—The Journal

Section 1. Name

The official publication of this Association shall be the Journal of the Oklahoma State Medical Association and referred to in these By-Laws as the Journal.

Section 2. Publication

The Journal shall be published once each month during the calendar year and distributed on or about the first of each month for the month for which it is named and numbered.

Section 3. Management

The Executive Secretary shall be the business manager of the Journal, shall arrange for its printing, have charge of the advertising and other business matters relative to the publication of same, subject to the advice and approval of the Editorial Board and the Council.

Section 4. The Editorial Board

The Editorial Board shall consist of three members selected by the Council for a term of three years, subject to removal by the Council, if and when the interests of this Association demand same.

(a) Immediately upon the adoption of these By-Laws, the Council shall elect members of the Editorial Board, one each for terms of one year, two years, and three years. Thereafter, at the expiration of the term of each member, a successor shall be elected for a term of three years. The Council shall designate one of the elected board members as Editor-in-Chief, and this designation shall, at all times, be subject to change by the council by giving thirty (30) days written notice to the Editor-in-Chief. Vacancies on the Board shall be filled by the Council for the unexpired terms.

(b) The Editorial Board shall have full charge of the editorial policy of the Journal; shall select articles

for publication among papers read at the previous annual session or any original contributions other than such papers which, in their judgment, will promote the best interests of the scientific program and policy of this Association; shall supervise and approve advertising material submitted for publication by the Executive Secretary; and perform any and all other duties as custom and usage may dictate to promote the best interests of the Association and in producing the best medium of advancing scientific and other information for the members of this Association.

(c) The Editorial Board will be responsible only to the Council, which shall have authority to change or modify the policy and management of the Board, in publishing the Journal.

(d) The Executive Secretary shall keep a detailed account of the transactions in publishing the Journal, including income therefrom and expenses. A separate report, pertaining to this matter, will be submitted for approval to the Council.

CHAPTER IX—Committees

Section 1. Standing Committees

The Standing Committees of this Association shall be: Credentials; Annual Session; Scientific Work; Public Policy and Publicity; Medical Education and Hospitals; Medical Economics; Study and Control of Infectious Diseases; Conservation of Health.

Section 2. Manner of Appointment

The Committee on Annual Session shall be composed of the President, President-Elect, Secretary-Treasurer. All other Standing Committees designated in Section 1 shall be composed of six members who shall be appointed by the President, subject to approval of the Council, for a term of three years, and until a successor has been appointed and qualified—appointments being staggered so that there shall be only two appointed in any one year unless a vacancy shall occur, which shall be filled by the President for the unexpired term of the vacancy except the Credentials Committee which shall be governed by Section 3 (a) of this Chapter.

Section 3. Committee on Credentials

(a) The Committee on Credentials shall be members of the House of Delegates. Members appointed to this Committee shall be members of the House of Delegates at the time of appointment. If any member of the Committee is subsequently not re-elected to the House of Delegates by his County Society or is otherwise disqualified as a delegate, the President shall appoint a regularly certified Delegate to fill the vacancy on the Committee left vacant by the member of the Committee who cannot qualify and the newly appointed member shall serve the unexpired term as long as he is qualified.

(b) The Committee on Credentials shall receive from the Executive Secretary a list of the members in good standing of each component society immediately prior to the Annual Session. They shall also obtain a list of duly elected delegates from each component society and shall determine the eligibility to sit as the authorized representatives of their respective component societies.

(c) In case of contest of delegates from any component societies, the Credentials Committee shall sit in judgment thereon and recommended for approval by the House of Delegates their findings. At the opening session of the House of Delegates, the Credentials Committee shall submit an authorized list of delegates and determine the presence of a quorum before the House of Delegates is authorized to proceed with official business.

Section 4. Committee on Annual Session

The Committee on Annual Session, with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for the meeting of the Association in the city designated by the House of Delegates at the last previous annual session. They shall designate special committees to have charge of the various activities of the annual session and cooperate with committees of the local society of the convention city. With the cooperation of the Committee on Scientific Work, programs of the session shall be prepared sufficiently

in advance for publication in the Journal preceding the Annual Session. They shall have jurisdiction over Scientific Exhibits and applications for such should be approved by the Committee before the Executive Secretary is authorized to provide space for them. This Committee is authorized to select and appoint any such sub-committees as, in its opinion and judgment, will facilitate the carrying on of the annual session to the best interest of all concerned.

Section 5. Committee on Scientific Work

The Committee on Scientific Work shall determine the character and scope of the scientific proceedings of the Association at each session, subject to the instructions and supervision of the Council. At least thirty (30) days previous to the annual session, they shall prepare and issue a complete program announcing the order in which papers, discussions and other business shall be presented, and which shall be published in the Journal issued previous to the annual session.

Section 6. Committee on Public Policy

The Committee on Public Policy and Publicity shall represent the Association with respect to the interest of public health, medical education, and scientific medicine. It shall keep in touch with professional and public opinion in this field. During the session of the State Legislature, this Committee, with the cooperation of the Executive Secretary, shall keep in touch with proposed legislation affecting the practice of medicine and public health, and advise with the officers and members of this Association the progress of such legislation. It shall keep in touch and cooperate with the Commissioner of Health and the State Board of Health of the State of Oklahoma to the mutual benefit of the medical profession and the public at large, and shall perform any and other duties assigned to the committee by the House of Delegates. The Committee shall be responsible for the dissemination of information concerning individual and community health to the public through articles prepared for publication in lay publications, for addresses or talks delivered before lay audiences under the authority of the Association, for broadcasting information or addresses by radio, and shall, in every way, seek to give the public a better knowledge and understanding of the aims and objects of scientific medicine. Upon the request or invitation of lay organizations, the Executive Secretary may obtain from the Committee the names of suitable members of the Association to deliver such addresses or papers.

Section 7. Committee on Medical Education and Hospitals

The Committee on Medical Education and Hospitals shall cooperate with the authorities of the School of Medicine of the University of Oklahoma in efforts to improve the educational standards as they pertain to the practice of medicine, to act in conjunction with members of the Council in providing postgraduate clinics or teaching for component societies, and cooperate with the corresponding Council of the American Medical Association. All questions pertaining to medical education, hospitals, clinics, and dispensaries shall be referred to this committee for consideration and action.

Section 8. Special Committees

(a) Special Committees may be appointed by the President on his own initiative or on order of the Council and/or the House of Delegates, and may include the following: Conservation of Health; Crippled Children; Industrial and Traumatic Surgery; Maternity and Infancy; Neurology; Study and Control of Infectious Diseases; Medical Economics; Prepaid Medical and Surgical Service. Any and all other such committees as may be advisable.

(b) All Special Committees shall consist of three or more members and shall be appointed to serve for one year concurrently with the term of office of the President appointing such committees.

CHAPTER X—Dues and Assessments

Section 1. Dues

The Amount of annual dues shall be determined by the House of Delegates during each annual session for

the next succeeding calendar year, and shall be levied per capita on the members of the Association. Dues shall be due and payable on or before January 1 of the year for which they are levied. The Secretary of each component society shall cause to be collected and shall forward to the Executive Secretary the dues for its members, together with such data as shall be required for a record of its officers and members. Any member whose name has not been reported for enrollment and whose dues for the current year have not been remitted to the Executive Secretary of this Association on or before March 1, shall stand suspended until his name is properly reported and his dues for the current year properly remitted.

Any member who is a full time employee of any sub-division of Federal, State, County or Municipal Government non-profit organizations, or medical school, who receives no outside remuneration from his medical skills and whose annual remuneration does not exceed five thousand dollars or has not been engaged in the practice of medicine in excess of two years since his hospital training, or has not held a full and active membership in the State Medical Association, shall be assessed for one-half of the annual dues of the Association. The eligibility for membership falling within these qualifications is to be a decision of the County Medical Society and an option of the applicant for membership. This membership shall be considered the same as an active membership and shall include all rights and privileges of an active membership. Any applicant for membership who has not previously held membership in this Association shall pay dues on the basis of the date he is elected to membership in the County Medical Society. If elected during the first quarter of the year he will pay full dues and if elected in any subsequent quarter he will pay dues based on that quarter and the remainder of the year.

Section 2. Assessments

The House of Delegates shall have the authority to levy special assessments on the membership of this Association in addition to regular dues as provided herein. Such special assessments are to be on an equal per capita basis except those active members who are not required to pay more than one half of the regular yearly dues, this category of members shall be subject to pay one-half of all special assessments made on active members. Special assessments are to be collected in the same manner as dues; provided, however, that the House of Delegates shall provide for the time of paying such assessment and establish date of delinquency of same. The method of collecting and reporting of such assessments shall be provided as for dues in Section 1 of this Chapter.

Section 3.

The record of payment of dues and assessments on file in the Office of the Association shall be final as to the fact of payment by a member and as to his right to participate in the business and proceedings of the Association and of the House of Delegates.

CHAPTER XI—Component Societies

Section 1. County and District Societies

All county or district societies now chartered and in affiliation with the Oklahoma State Medical Association, or those that may hereafter be organized under the authority of the Council of this Association, are acknowledged as component societies as referred to in this Constitution and By-Laws provided that their Constitution and By-Laws do not contain provisions in conflict with the Constitution and By-Laws of this Association. The Council, with the approval of the House of Delegates, shall have the authority to revoke the charter of any component society whose actions are in conflict with this Constitution and By-Laws. Lack of representation of a duly accredited delegate or alternate at three consecutive annual meetings of the House of Delegates of this Association shall be sufficient grounds for withdrawal of a charter by a majority vote of the House of Delegates.

(a) Requirements for Establishing and Maintaining a County Society.

To create or re-activate a County Medical Society, the provision of Section 3 of this Chapter of these By-Laws must be met. To maintain a County Society the number of active members must be at all times at least five in number, the Society must meet at least six times each year with one meeting being in either November or December for the purpose of electing officers, delegates and alternates of the County Society for the succeeding year. The Secretary of the Society at the time of the election of new officers shall immediately transmit in writing to the Executive Office of this Association the results of its election.

(b) To Create and Maintain a District Society.

As provided in Chapter III, Section 4, subsection (c), the House of Delegates shall approve the creation of District Societies and representation in the House of Delegates shall be in conformity with the provisions of Chapter III, Section 1.

To organize a District Society there must be at least ten active members of this Association within the District and at least one member shall reside in each of the respective counties of the District. The County Societies and members of this Association involved in the organization of the District Society shall by mutual agreement notify the Executive Officers of this Association regarding their intention. The Request shall be presented to the Council at any regular meeting, at least ninety (90) days prior to the annual meeting of this Association. The council, with their recommendation, shall publish in the Journal at least thirty days prior to the annual meeting, the request for an organization of a District Society. When such a District Society is approved by the House of Delegates it shall be issued a charter and the component county societies shall surrender their charters to the Executive Office of the Association. The Provisions of this Constitution and By-Laws governing County Societies shall apply to District Societies.

Section 2. Membership

(a) When a member in good standing of a component county society, except members who are in the United States Military or Public Health Service, State Public Health Service, or one whose employment makes his residence in any community temporary, moves to another county in the state, he shall be given a written certificate of his membership by the secretary of his county society without cost. This certificate shall accompany application for membership in the county society in the county to which the member has moved. Pending action on the application, such member shall be considered in good standing in the society from which he was certified. In case of rejection, the applicant may appeal for relief to the Council. Appeal must be made in writing and must be delivered into the hands of the Council not more than thirty (30) days following date of notice of rejection. Consideration of the appeal shall be given by the Council at the earliest time possible. Not more than ninety (90) days shall elapse following the date the appeal has been received by the Council until a hearing shall be given to the applicant and to the component county society, and the action taken by the Council on the appeal shall be final. Under no circumstances shall membership be retained in a component county medical society for a period longer than one year following the issuance of a certificate of removal. Any physician living near a county line may hold membership in the medical society of the county adjoining his residence if it is more convenient for him to attend the meetings of the medical society of that adjoining county, but before a physician is affiliated with a medical society in a county in which he does not reside, the consent of the medical society in the county of which he does reside must be first obtained. Should no County Society exist in the County in which a physician resides he may be eligible for membership in an adjoining County Society until such time as there are sufficient qualified physicians residing in the county to formulate a Society within the county.

(b) Should the license of a member of a component society be suspended for any period, his name shall be

automatically dropped as of the date of suspension, and he shall not be entitled to reinstatement of membership in the State Association until January of the year following his period of suspension.

Should a case regarding the licensure of a physician be pending before the Oklahoma State Board of Medical Examiners, membership privileges in the State Association cannot be granted the physician in question until such time as a final determination has been reached by said Board.

(c) A component society may censure, suspend or expel any member for any cause set out in the Constitution or By-Laws of said society or for any cause deemed sufficient at law for disciplinary action.

(d) Disciplinary Procedure.

No disciplinary action shall be taken against a member of a component society without serving the accused at least ten (10) days in advance of trial with a written copy of the charges against him and affording him the opportunity of a hearing. Should a hearing or hearings be held, records thereof shall be kept by the secretary of the component society, who, within fifteen (15) days after the component society has taken final action, shall transmit to the Council of this Association certified copies of such records.

(e) Appeals.

Any member against whom disciplinary action has been taken who feels that he has not been given a trial in accordance with the provisions of this Constitution and By-Laws of his component Society shall have the right to appeal to the Council, under such reasonable rules as the Council may adopt with respect to such appeals. To be considered by the Council, appeals must be made in writing within sixty (60) days after the appellant has been given written notice of censure, suspension or expulsion which is contemplated.

Upon receipt of an appeal the Executive Secretary of this Association shall write immediately to both the president and the secretary of the Component Society, notifying them that appeal has been made and demanding certified copies of all records in the case which have not been submitted previously, as provided in subsection (d) of this Section. If the component society fails to submit certified copies of records within sixty (60) days of demand, the appellant shall be reinstated to membership in good standing by the Council of this Association.

Section 3. Charter

Only one component medical society shall be chartered in each county. No County Society, however, shall be chartered or hold its charter unless at the time chartered the petition for charter is signed by at least five physicians believed to be eligible for charter memberships in the society.

(a) Charters of County Medical Societies may stand suspended or may be revoked should the number of members fall below that of the minimum requirements for two consecutive years.

(b) Custody of Charter

The charter of each component society as issued by the Oklahoma State Medical Association shall be preserved and be in the custody of the Secretary of each component society.

(c) To Dissolve District Societies. Should the members of a District Society desire to disassociate themselves as a District Society the action shall be taken at a regular meeting of the District Society in sufficient time to give ninety days notice of such request to the Executive Office of the Association and the action of the District Society will be presented to the House of Delegates for approval. Co-existing with this action the physicians from the counties making up the District Society may petition the House of Delegates for the creation of a County Society within their respective county as otherwise provided in these By-Laws.

Following the holding of the regular meeting of the District Society should the members from the County desiring to withdraw still be of the same decision, a petition signed by a majority of the members residing in the County wishing to withdraw shall be submitted to the House of Delegates through the Executive Office of the Association at least ninety days prior to the Annual Meeting.

Co-existing with this action the physicians from the withdrawing County may petition the House of Delegates for the creation of a County Society within their County as otherwise provided in these By-Laws.

Section 4. Constitution and By-Laws

Each component society shall have a Constitution and By-Laws. These shall be in conformity with the Constitution and By-Laws of the Oklahoma State Medical Association, and a copy thereof shall be transmitted to the headquarters of this Association for approval and record. Any amendment or change in such Constitution and By Laws of component societies shall be submitted to the Council for its approval and then filed with the Executive Secretary.

Section 5. Functions and Duties of Component Societies

Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted toward improving the science and art of medicine and the welfare of the people. Systematic efforts shall be made by each member and by the society as a whole to increase the membership until it includes every doctor of medicine who meets the qualifications for membership in the County.

(a) Each component society shall keep an official record book or books, which shall include an official copy of its Constitution and By-Laws, a roster of its membership, and all personal data pertaining to members which may be of historical and other use.

Section 6. Certification of Delegates

Each component society, at least sixty (60) days prior to the annual session of this Association, shall elect one or more delegates and an equal number of alternates to represent it in the House of Delegates, in accordance with Chapter III, Section 1, of these By-Laws. The secretary of each component society shall send a list of delegates and alternates to the Executive Secretary of this Association as soon as possible before the annual session, and provide each delegate and alternate with a certification of such election for presentation to the credentials committee, if such procedure is deemed necessary or advisable by said Committee. Representation in the House of Delegates shall be contingent on compliance with the foregoing provisions.

CHAPTER XII—Parliamentary Procedure

Where the Constitution and By-Laws of this Association does not make provision for parliamentary procedure, deliberations of this Association, committees, or parts thereof, shall be conducted in accordance with parliamentary usage as defined by the latest edition of Roberts Rules of Order.

CHAPTER XIII—Amendments

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, provided that the proposed amendment has been properly submitted in writing to the House of Delegates at the first meeting of the annual session and has laid on the table at least until the following session.

CHAPTER XIV

Special Recognition of Members Who Have Been in the Practice of Medicine at Least Fifty Years

Any, physician, a member of this Association, who has been engaged in the active practice of medicine for fifty years and a member of this Association for the

preceding five years and on recommendation of his County or District Society shall be entitled to have his name entered on a special roster maintained by the State Association in recognition of his services to humanity for a half century.

The qualifying member shall receive special recognition at a meeting of the House of Delegates during the Annual Meeting and shall be presented with a suitable certificate from the Oklahoma State Medical Association in commemoration of his outstanding length of service in the profession. Should circumstances prevent the member being present at the Annual Meeting to receive this honor, the presentation will be made at an appropriate time and place to be selected by the President.

CHAPTER XV—Enabling and Repealing Clause

Section 1. Upon adoption of these amendments to the By-Laws, all previous By-Laws, motions of record, rules and regulations in conflict with same are hereby repealed, provided, however, that all officers of this Association now in office shall continue their incumbency until their successors are elected, as provided in these By Laws.

Section 2. Any Chapter, Section, subsection, or any part thereof in conflict with the present Constitution of the Oklahoma State Medical Association shall be of no effect, but all other parts of these By-Laws not so conflicting with the present Constitution shall be in full force and effect immediately upon its passage.

(Adopted 1940)

(As Amended Through 1949)

GRIEVANCE COMMITTEE

GRIEVANCE COMMITTEE

The House of Delegates at the Annual Meeting in Tulsa, May, 1949, took a far reaching step of utmost importance to the medical profession of Oklahoma in the creation of the Grievance Committee of the Oklahoma State Medical Association.

This action was based upon a recommendation of the Council which emphasized that the profession is constantly subject to widespread criticism in magazines and the press not only through news stories but editorially. The adverse effects of such criticism, though usually subject to a more favorable interpretation when the complete facts are presented, are never eliminated by subsequent retractions or explanations.

The basis of this criticism, while subject to many variations, is usually to be found in complaints of:

1. Difficulty in obtaining medical services in the home, especially at night.
2. Wide variation in fees charged for what appear to be comparable services.

The Grievance Committee, according to the terms of its creation by the House of Delegates, is composed of the five immediate past presidents of the Association still living and is authorized to consider complaints regarding professional conduct of the members of the Association from three principle viewpoints:

1. The amount of service rendered.
2. The responsibility assumed.
3. The patient's ability to pay.

Organization of the Committee and regulations for its operation were not prescribed by the House of Delegates. As a result, the operation of the Committee can remain flexible and adaptable to individual situations though a general plan of operation has been

adopted which is designed to provide for fair and impartial consideration of all matters presented.

Features of that plan are:

1. The requirement that all grievances be submitted in writing of the signature of the person submitting the grievance.
2. The provision of ample opportunity for presentation of the facts in each case by both the patient and the physician. When the committee feels it necessary, the patient and the physician are invited to appear in person before the Committee, but not at the same time.
3. When circumstances will at all permit, both the patient and physician are provided with complete information supplied to the Committee by the other.
4. Every effort is made to secure settlement of grievance by individual agreements between the physician and the patient with no recommendations being made by the Committee until that means has been exhausted.
5. Since the House of Delegates did not authorize the Committee to take any disciplinary action, those cases appearing to require such action are submitted to the County Medical Society as provided in the Constitution and By-Laws of the Association.

The establishment of the Committee was the occasion of much favorable comment in the press of the State and was reported in at least one national magazine.

Operation of the Committee has remained of keen interest to the newspapers and the publicity received has been completely favorable.

The Committee has received whole-hearted cooperation from the members of the profession who have been the subject of grievances and will depend for its future success on the continuation of that attitude.

PUBLIC RELATIONS

PUBLIC POLICY COMMITTEE

In recent years the relations of doctors of medicine with the world at large and with each other, which often are grouped under the general heading of "public relations", have been increasingly involved with the social, economic and political problems of our time. As a service both to the profession and the public, medical groups have set up committees to survey such problems as they relate to medicine and to work for solutions to them. Oklahoma State Medical Association was a pioneer among State Medical Associations when it formed a Public Policy Committee to deal with such problems.

The work of the Public Policy Committee has increased manyfold in the relatively few years since its inception. Much of the activity of the Executive Office and a great proportion of the work of the Auxiliary is now carried on under the direction of this group.

The Public Policy Committee, which meets in Oklahoma City on the second Thursday afternoon of each month, is a six-man Committee responsible to the Council of the Association. Each of the six members of the Committee serves as chairman of a Sub-Committee devoted to a specialized phase of public relations. These six are Public Speaking; Newspaper; Professional Relations; Radio; Awards, Contests and Literature; and Visual Education.

Since the American Medical Association's National Education Campaign against compulsory health insurance was begun in late 1948, the Public Policy Committee has had the responsibility of coordinating the public relations activities of the State Association and its component Societies with those of the National Education Campaign. At the present time, the public relations program of the state is closely correlated with the A.M.A. four-point program for education of the public regarding compulsory health insurance. This program consists of

1. An effective statewide Endorsement Drive
2. An intensive Publicity Campaign
3. A well organized, adequately staffed Pamphlet Distribution System
4. An energetic, carefully managed Speakers Bureau

The following brief outline of the work of the Public Policy Committee through its six sub-divisions illustrates the close integration of the state public relations work with the National Education Campaign outlined above.

PUBLIC SPEAKING

One of the major aims of both the national and state campaigns is to inform the public of the dangers of both the overall Welfare State philosophy and of the projected health insurance plans through public speaking. Many hundreds of Oklahoma audiences have been reached by speakers representing the Association and the Auxiliary. Also, the Committee has sponsored the appearance of speakers of national reputation with-

in the state and will continue to do so as often as possible.

Another work in the public speaking field is the preparation of speakers kits with reference material and literature. This Committee provides such kits on request to the Executive Office.

NEWSPAPER

Since its beginning, the Committee has recognized the need for better understanding between the medical profession and the press and has worked to establish such a relationship based on a mutual appreciation of the problems of each group. Much has been accomplished in this field. News releases which the Committee issues periodically for the 300 member papers of the Oklahoma Press Association receive an excellent press. These include health features of general interest as well as news stories about the Association.

When the Grievance Committee was established, the newspapers of the state gave the Association their full cooperation in announcing the function of the new Committee and the procedure by which complaints could be brought before the body. Also, many editorials were printed commending the Grievance Committee.

PROFESSIONAL RELATIONS

The establishment of the Grievance Committee has been the Association's most significant action this year in the field of Professional Relations. Feeling that it had a major responsibility to inform the public of the existence and the function of this body and the procedure to be followed in bringing a complaint before the Grievance Committee, the Public Policy Committee has endeavored to work with the press of the state toward this end. As noted above, the Grievance Committee received an excellent press.

Also in the field of Professional Relations, the Committee has mailed copies of the revised Principles of Medical Ethics in booklet form to all members of the State Association. These booklets will also be sent to all medical students in the state.

The monthly News Letter put out by the Public Policy Committee is designed to summarize news in capsule form for easy readability, with particular emphasis on important developments in national legislation and other public relations problems. This News Letter is sent to all members of the Association and to representatives of the allied professions group.

RADIO

The Radio Sub-Committee sponsors a five-minute public service program entitled "Tell Me, Doctor" on ten radio stations in all parts of the state. The Sub-Committee also has an expansion program under consideration which would make additional radio programs available. Various County Medical Societies also sponsor radio programs on health subjects of general interest.

AWARDS, CONTESTS AND LITERATURE

This Committee has sponsored essay contests for high school students. Also, it assists County Medical Societies in handling such contests and provides suitable literature and kits for students taking part in such competitions.

The quantity of health insurance literature distributed in Oklahoma since the Public Policy Committee was formed can be conservatively estimated at more than a million pieces. Since the A.M.A. National Education Campaign was begun, this phase of the public relations work has been greatly accelerated. Through the Executive Office, the Committee offers a wide selection of the current literature on health insurance and related topics to all physicians and Auxiliary members, as well as to the laity.

VISUAL EDUCATION

In cooperation with the Woman's Auxiliary, the Visual Education Sub Committee has presented health exhibits at various fairs and conventions, including the Garvin County Fair, Seminole County Fair, Tulsa State Fair, Oklahoma State Fair, Muskogee Free State Fair, Oklahoma Education Association Convention and the Made-in-Oklahoma Show. More than 600,000 persons have seen these exhibits.

AUXILIARY

The Public Policy Committee is indebted to the Woman's Auxiliary for the excellent work which the Auxiliary is doing in the public relations field, for much of the "manpower" of the program is provided by these ladies.

MAL-PRACTICE CLAIMS

It has been five years since the Year Book asked for a discussion of the claims which arise because of alleged failure of physicians and surgeons to properly perform their duties toward their patients. During that period the number of claims has multiplied again and again. In the past two years there have been more claims than in the preceeding fifteen. For every claim that is publicized by a lawsuit no less than ten are settled quietly and amicably or are discouraged to the point of abandonment.

This increase is largely due to relaxing the educational program which was maintained aggressively until everyone became too busy prosecuting the war. Then no one had time to make a claim. The lawyers remaining in active practice were too busy to beat the bushes. Very few lawyers are ambulance chasers by choice. Now, economic changes, the liberal attitudes of young and inexperienced physicians, overwork, and insufficient and inefficient assistance and nursing care have all contributed to the increase of claims. Unfortunately, the attitude of many doctors is to let the insurance company pay or to shrug off threatened claims as inconsequential. Mal-practice claims cannot be disposed of by merely refusing to recognize them. They are grim realities and must be faced as such. The entire group suffers and is penalized for the delinquencies of the few. More than any other profession or business the physician controls his own mal-practice insurance rates. The companies only compile statistics and promulgate rates based on the experience in a very limited field.

As to the factual causes of mal-practice claims there have been no basic changes. Most claims can be avoided by careful attention to detail, cleanliness, adequate records, a sympathetic and professional bedside manner and a closely buttoned lip. Somewhere in the background of every claim is a telltale, talkative doctor, either careless or motivated by greed, ambition or professional

jealousy and spite. No claim can be prosecuted successfully without willing medical help and testimony, often carefully concealed and sometimes negatively given, but nonetheless effective. No honorable man will countenance any person being deprived of just compensation for wrongful injury but the unscrupulous damage suit lawyer is concerned neither with honor or justice and the doctor who assists him in any way cannot avoid being tainted by the association.

There is an aggressive and concerted move on the part of an association of attorneys and their apostate medical adviser-assistants to undermine and destroy the natural antipathy of the public and the courts toward mal-practice claims and astronomical judgments. Unless equally strong measures in preventive education and public relations are taken by those who practice the healing arts the time is not far distant when mal-practice lawsuits will be regarded, by the public and the courts, in the same light and with the same unconcern as is now evidenced in ordinary damage suits and the medical profession will be held in the same category as the reckless or drunken driver. Every mal-practice claim is another step toward governmental regulation and control.

Last, but not least, claims should be reported promptly. Complete frankness regarding every detail of the doctors relationship with the patient-claimant is of the utmost importance. Prompt and intelligent action, taken in time, will prevent most mal-practice lawsuits, but, the insurance attorneys and adjusters must have prompt and complete information and wholehearted cooperation. The most difficult cases to handle are those which have been complicated by self-treatment. If the doctors will refrain from the practice of law and insurance the lawyers and adjusters will gladly refrain from the practice of medicine. There must be a constant awareness that every case treated is a potential mal-practice claim.

Committee on Postgraduate Medical Teaching

The physicians for the state of Oklahoma have long been interested and active in providing for themselves some type of postgraduate medical training. An organized effort was made as early as 1925 under the direction of the Extension Division of the University of Oklahoma. Limited funds available through the Extension Division required the Association to assist in the financing of that program in 1929 and postgraduate medical teaching in Oklahoma became the complete responsibility of the Association in 1933 when all funds available from the state were withdrawn. From 1925 until 1938 the postgraduate training offered was on a short course basis and was made available to the physicians of the state under a circuit plan similar to that in operation at the present time.

In order to expand and improve the postgraduate training program, the Committee on Postgraduate Medical Teaching was organized in 1937 and has continued the administration of this phase of the Association's activity to the present time.

Through the Committee, the Association was able to secure financial assistance from The Commonwealth Fund of New York for a series of two-year courses which began in 1938. The financial participation of The Commonwealth Fund has continued since that time and will end December 31, 1950, after a total contribution by the Fund of \$111,560.00, which has been utilized by the Committee in offering courses in Obstetrics, Pediatrics, Internal Medicine, Surgical Diagnosis, Gynecology and a second two-year course in Internal Medicine.

In addition to the contributions of The Commonwealth Fund, the Oklahoma State Health Department has, during the same period, contributed \$64,000.00, which has been of material assistance in bringing the postgraduate courses to Oklahoma's physicians.

The primary object of The Commonwealth Fund, in offering financial assistance to this type of program, is to stimulate postgraduate medical education throughout the Nation, but it has never been the object of the Fund to provide continuous financing in any state.

As a result of that policy it has been necessary for the State Association to provide a total of \$24,000.00 for the use of the Committee during the last twelve years, and at the same time registration fees paid by physicians taking the courses have been increased from \$6.00 to \$20.00.

Every effort has been made by the Committee to insure that the training offered is medically sound and of practical value to the physician. The instructors have all been outstanding specialists in their fields and have not only delivered prepared lectures as the formal part of each course but have also been available for advice and consultation.

Under the present plan of operation the state is divided into eight teaching circuits, each of which contains five cities in which the course is offered, a plan which makes the facilities of the program readily available to every doctor of medicine in the state. A manual summarizing the course is prepared by the instructor and is presented at the close of the course to all enrolled. A Certificate of Attendance is given to those who attend seven or more of the ten lectures.

Future courses are continuously being studied and planned by the Postgraduate Committee. The subject for each two-year course is chosen by the Committee from tabulation of questionnaires returned by the physicians enrolled.

During recent years, one of the most popular subjects to be requested has been Psychosomatic Medicine. The Committee is now in the process of investigating programs of this type and the possibilities of obtaining a competent instructor.

The results of the Postgraduate Program has been to increase the practical and ethical standards of the profession and produce a greater unity among the members of the Association.

The Committee is anxious at all times to raise the standards of its training program and realizes that this can best be done by adapting the program to the needs of the profession and it solicits and welcomes any criticism or suggestions.

EBERLE & COMPANY

Malpractice Insurance

Office:

Eberle Building

16th at Classen

Oklahoma City, Okla.

Phone:

58-6321



The Group Malpractice Insurance for members of the Oklahoma State Medical Association is available through Eberle and Company, Representatives of London and Lancashire

PRIVATE HEALTH AND WELFARE AGENCIES

OKLAHOMA DIVISION

THE AMERICAN CANCER SOCIETY

937 Commerce Exchange Building

Oklahoma City, Okla.

Telephone 79-2659

J. R. B. Branch, M.D., Executive Director

The Oklahoma Division of the American Cancer Society since its organization has continued to carry on its program of education, lay and professional, service and research.

Lay Education

The educational program consists of the dissemination of literature through various organizations such as schools, civic clubs, federal and industrial groups, and the following women's organizations — Federation of Women's Clubs, Business and Professional Women's Clubs, the American Legion Auxiliary, Order of the Eastern Star, Women's Auxiliary to the State Medical Association and the Women's Auxiliary to the Farm Bureau. We also supply literature for doctors' offices when they so request.

Lectures are given to lay groups and appropriate movies shown whenever opportunities present. Films are also available for lay groups whether or not a speaker is asked for. A list of these may be had on application. Radio broadcasts are also given from time to time. Exhibits are set up at State and County Fairs during conventions and large meetings. There is one also being used in railway and bus stations.

Professional Education

Professional education is being aided by cancer symposia, lectures to Medical Societies, and through a Cancer Bulletin and cancer brochures which are sent without charge to every doctor and dentist in the State.

Films suitable for professional groups are also being shown and are available on loan basis whenever desired. A list of these will also be furnished upon application.

The profession is also supplied with containers for specimens removed for biopsy, and specimens from indigent patients are examined without charge by members of the local Association of Pathologists.

The tumor clinics held at the University Hospital in Oklahoma City, St. John's Hospital in Tulsa, and the State Health Department in Muskogee, also afford educational opportunities not only through the regular staff but frequently through the additional presence of distinguished out-of-state specialists.

Service

The above mentioned tumor clinics also take care of cancer patients so far as detection and diagnosis are concerned, and through the cooperation of the State Department of Health which also participates in the above mentioned educational facilities.

Patients may be admitted to the following three hospitals: — University Hospital, Oklahoma City, St. John's Hospital, Tulsa, and the Muskogee General Hospital, Muskogee, for a period of three days, for the purpose of cancer diagnosis. Indigent patients may be furnished with transportation to and from these hospitals, and if their treatment does not require hospitalization, the Division will furnish subsistence in a nearby hostel or boarding house during the time of treatment, which is usually complete within three or

four weeks. The Division is not in a position to assume responsibility for hospitalization during treatment. These facilities may be secured by getting in contact with the local County Commander of the Oklahoma Division who will assist the doctor in every way possible to get patients into these hospitals for diagnosis.

The Mobile Cancer Detection Clinic has been in operation since the Spring of 1946. A three-year report of its activities was published in the Journal this Spring. The clinic comes only with the full desire and cooperation of the County Medical Societies. It continues to be a very effective method in detection as well as a very effective aid in the educational program. These clinics are free. Patient should be referred by his or her physician, if he so desires; if not referred, each person is required to give the name of his family physician to whom a report is sent with the findings and recommendations of the clinic staff. Containers for specimens of positive or suspicious cases are furnished and sent to the doctor with directions as to how they shall be handled. The report from the pathologist comes to the doctor direct.

Through the courtesy of some of the manufacturers, supplies of Testosterone are available and furnished to the medically indigent upon the physician's recommendation at manufacturer's cost. Reports on the results of this medication are required. It is to be used only in cases of breast cancer.

Research

In addition to a sizeable contribution made to the Oklahoma Medical Research Foundation, the Division has sponsored every year research projects within the State not only through funds sent to the National organization and returned to Oklahoma for that purpose but also from funds we have retained and allocated to research. Several projects are currently under way at the University of Oklahoma School of Medicine, as follows:

*Amount
of Grant*

The Study of polysaccharides (multiple sugars) and proteins in normal and neoplastic tissues, Mark R. Everett\$11,400

An investigation of anti-reticulo-endothelial serum methods of preparation, immunologic characteristics and effects on the living organism with special reference to its therapeutic value in the treatment of cancer, Howard C. Hopps 5,000

Micromanipulation studies of the effect of carcinogens on the structure and function of normal cells and tissues, Kenneth M. Richter 3,134
Age changes in human epidermis, Zola K. Cooper and J. M. Thuringer 3,675

Total Grant\$23,209

THE NATIONAL FOUNDATION FOR INFANTILE PARALYSIS, INC.

Carl C. Thompson,

State Representative—Western Oklahoma

1141 N. Robinson

Oklahoma City, Okla.

Telephone 3-1817

Don J. Kile,

State Representative—Eastern Oklahoma

215½ East 6th Street

Tulsa 3, Okla.

Telephone 5-9027

The purpose of the Foundation is to lead, direct and unify the fight against infantile paralysis. Activities include research, education, epidemic aid, and patient care. Grants are made to institutions for research in the transmission, prevention, and cure of infantile paralysis, as well as in improved treatment methods. The educational program provides information to professional and lay groups, and scholarships and fellowships for training of doctors, nurses, physical therapists in a variety of specialized fields including virology, orthopedic surgery, pediatrics, physical medicine, orthopedic nursing, physical therapy, etc. In cooperation with representatives of health, welfare, and social agencies, epidemic preparedness programs are conducted to help communities meet outbreaks. Epidemic aid such as money, equipment, personnel, and professional consultation is available to communities. All programs of the National Foundation are made possible through contributions to the MARCH OF DIMES.

It is the policy of the National Foundation for Infantile Paralysis NOT to recommend any doctor or hospital, but strictly for information purposes, the following hospitals in Oklahoma accepted and treated acute polio during the epidemic of 1949:

1. Alva General Hospital, Alva, Oklahoma
2. Benedictine Heights Hospital, Guthrie, Oklahoma
3. Bone and Joint Hospital, Oklahoma City, Oklahoma
4. Community Hospital, Elk City, Oklahoma
5. El Reno Sanatorium, El Reno, Oklahoma
6. Hillcrest Memorial Hospital, Tulsa, Oklahoma
7. Masonic Hospitals, Cherokee, Oklahoma
8. St. Mary's Hospital, Enid, Oklahoma
9. St. John's Hospital, Tulsa, Oklahoma
10. University Hospitals, Oklahoma City, Oklahoma
11. Valley View Hospitals, Ada, Oklahoma
12. Western Oklahoma Hospital, Clinton, Oklahoma

All these hospitals do not normally accept polio, thus it is strongly urged that admissions be arranged by telephone BEFORE sending a patient to any of them.

Since there are fewer hospitals than doctors concerned with the polio problem, continual contact is maintained with the hospitals and they can advise the patient who to contact in their home county to receive financial assistance if needed.

Briefly, the policy of the National Foundation for Infantile Paralysis in rendering financial assistance is: "If the standard of living of the family involved will be materially lowered by the expense of giving the patient the best available medical care, then the National Foundation should pay that part of the expense which works a hardship on the family." All patient care assistance is rendered through the local County Chapter.

The referral of polio patients to the Georgia Warm Springs Foundation is not ordinarily recommended because necessary treatment in all except the most unusual cases can be provided with considerably lower expense for hospitalization and transportation when the treatment is provided through facilities available in the state. Patients having unusual residual conditions may be referred to Georgia Warm Springs by the attending physician communicating with the Medical Director, giving the diagnosis and history as well as his recommendations. The medical staff at Georgia Warm Springs will review the case and, on the basis of their findings, will admit the patient when space is available. It is to the advantage of all concerned to hold the number of cases referred to Warm Springs to a minimum, since the greatly increased expense must be borne either by the family or by the National Foundation.

Any Oklahoma physician can feel perfectly safe in arranging hospitalization for a polio patient and depending on the family and hospital to make financial arrangements later.

OKLAHOMA MEDICAL RESEARCH FOUNDATION

924 Commerce Exchange Building

Oklahoma City, Okla.

Telephone 2-9527

Hugh G. Payne, General Manager

I HISTORICAL BACKGROUND

In 1944 the Oklahoma Medical Research Foundation was only an idea in the thinking of a small group of Alumni of the University of Oklahoma, School of Medicine, sparked by the late Dean Tom Lowry.

In 1945 the idea developed from the talking stage into a plan for a medical research foundation to be formed to provide funds to promote, develop, construct and maintain a medical research institute.

1946 saw the plan become an organization. The Alumni of the Oklahoma University School of Medicine provided funds for a survey of the state to determine the public's interest in supporting the Foundation. On August 23, 1946, the Oklahoma Medical Research Foundation was incorporated under the laws of the state.

II UNIFIED EFFORT OF ALLIED PROFESSIONAL GROUPS

Never in the history of this nation or any other nation as far as Foundation officials are able to ascertain has a great medical research center come into being through the unified effort of all legitimate allied professional healing groups. Early in 1947 the Doctors of Medicine set a goal of providing one million dollars within that professional group for the operation and maintenance of the Foundation. The campaign organization was set up which provided for a state chairman, district chairmen, county and community chairmen. This funding campaign organization went into action immediately and at this time over half of the goal has been pledged.

In September 1947 the Oklahoma State Dental Association officially approved participation of Dentistry in the campaign research program and set a goal of \$225,000 to be raised among the Dental Profession.

The Oklahoma State Pharmaceutical Association requested the Foundation officials to allow their association to accept its full share of the founding program; a goal of \$300,000 was set, and at this time a most excellent funding campaign corps of Pharmacists have made a good start in reaching the Pharmacists' goal of \$300,000.

In November 1947 the State Nurses Association unanimously adopted a resolution providing a research fund of at least \$50,000 among the nurses of the state toward the Foundation's support. This group organized its campaign and in a very short time the Nurses' research fund of \$50,000 had been reached and over subscribed.

Certainly Oklahoma is setting an enviable record toward providing ways and means for the progress of Medical Science. Without the leadership of the Doctors of Medicine, this unified effort would not have been possible.

III ADMINISTRATIVE AND OPERATIONAL POLICIES

The administrative and operational policies of the Foundation are set forth in the following three divisions:

1. Characterization
A non-profit corporation.
2. Purpose (General)

To promote educational objectives by encouraging, fostering and conducting scientific investigations in medicine, dentistry, pharmacy and nursing; to foster and encourage education in the medical sciences, both pure and applied; to provide means and machinery by which scientific discoveries and processes may be developed, patented and any profits therefrom used for the benefit of the Foundation; to receive gifts, acquire and hold property.

3. By-Laws

The organizational By-Laws adopted by the Board of Directors in the inception of the Foundation served its purpose well. However, the Foundation developed so rapidly, it became necessary to revise the By-Laws to include the Allied Professional Groups, making possible the initial Foundation program, as well as providing efficient methods of operating the future Foundation research effort.

Below is given a brief digest of the By-Laws:

Membership

The Foundation membership consists of all persons contributing to the Foundation. Voting privileges are: (1) Each person contributing more than \$50.00 per year for a period of 2½ years is entitled to one vote; (2) Representation for persons contributing less than \$50.00 per year for 2½ years is provided by one vote for each 20 such contributors.

Officers

The officers of the Foundation consist of six — President, Vice-President, Secretary, Treasurer, President of the Executive Committee and General Manager of the Foundation. All officers except Chairman of the Executive Committee are elected by the Board of Directors, representing the membership, for a term of one year. The Chairman of the Executive Committee is nominated by the Executive Committee and approved by the Board of Directors. Any officer is eligible to succeed himself.

Meetings

Annual meetings of members shall be held. The Executive Committee shall set date and place and give thirty days' notice. Special meetings may be called by the President upon the request of 25 members.

Board of Directors

There shall be a Board of Directors of not less than twenty nor more than forty.

Classification of Board Members:

(A) Officers.

(B) Representative Directors. Representative directors shall be elected by the membership, one each from the councilor districts of the State Medical Association.

(C) Directors at Large. Twenty-three additional directors, not necessarily members of the Foundation, may be elected at any time by the Executive Committee and shall be selected on the basis of: (1) Their holding an official position with an organization or agency having a logical interest in the Foundation, and/or (2) their special interest in the Foundation. Directors of these classes shall be elected for a term of 3 years, approximately one-third being elected annually. There shall be at least two meetings annually.

EXECUTIVE COMMITTEE

The Executive Committee shall consist of not less than ten nor more than seventeen members. Membership is composed of the officers of the Foundation, one representative each from the Dental and Pharmaceutical profession, the Chairman of the Bequest Committee and eight others who shall be elected by the Board of Directors. Members shall serve for a term of one year but may succeed themselves.

It shall be the duty of the Executive Committee to exercise, when the Board of Directors is not in session, any and all powers of the Board of Directors.

The Executive Committee shall meet at least once monthly or as called by Chairman.

STANDING COMMITTEES

(Members shall serve for terms of three, two and one years).

There shall be the following committees:

Research Committee, composed of not less than nine members appointed by the Executive Committee, with authority to approve or disapprove all research applications and recommend to Executive Committee appropriations necessary to carry on such projects.

Inter-Allied Professional Committee, of not less than 9 members, composed of three Doctors of Medicine, three Dentists and three Pharmacists, appointed by the State Presidents of the groups named. It shall be the duty of this committee to foster, organize and promote inter-professional relationships, for enlightenment, the raising of professional standards of practice and serve as arbitrators on problems involving the component organizations.

Finance Committee, composed of not less than five members, all successful business executives, appointed by the President to render opinion when requested to do so by Executive Committee on financial matters, invest surplus monies, and pass on advisability of accepting bequests, grants and gifts subject to restrictions.

Dental Research Committee, of not less than five members appointed by President of State Dental Association, to develop and process all applications relating to Dental Research, interpret advances in dental research and arrange, foster and promote dental seminars and conferences for the good of the profession.

Pharmaceutical Research Committee, composed of not less than seven members of the Association, appointed by the Association, to develop and process all applications relating to pharmaceutical research, and to formulate, foster, promote and arrange seminars and conferences to enlighten members of the profession of advances in the field of pharmacy and pharmacodynamics.

Bequests Committee, consisting of not less than five persons appointed by the President, to formulate and prosecute plans in relation to the securing of Bequests for the Foundation.

Medical Progress Committee, composed of one elected member of each county medical society, or appointed by President of State Medical Association in those counties not maintaining a county society, to interpret current efforts of Foundation relating to research projects to local societies, arrange and serve as channels for specific conferences and seminars on local, district and state-wide basis in order that local members stay abreast of new scientific developments.

Local Units of the Foundation will be maintained in each community with appropriate officers, for the purpose of carrying on educational efforts in relation to all phases of the Foundation programs and to serve as nucleus of membership in providing elective representatives for county and district representation.

IV PROJECTED TEN-YEAR RESEARCH BUDGET

Research scientists agree that worthwhile research in unknown fields requires enough time to explore all possibilities evolving from the beginning or original investigation. Medical research history proves this concept. Some of the greatest discoveries for the good of mankind have taken years of search and research. With

this thought in mind, a group of scientists worked out a minimum budget to carry on an adequate program and based the budget on a ten-year period. The minimum budget recommended was \$3,000,000. Should more funds be available, then more research could be undertaken.

Often the question is asked, "How will the Foundation exist after the ten-year period?" It is felt by the officers of the Foundation, which include eminent scientists, that the research effort will be so beneficial during the ten-year period that the people of the State, as well as philanthropic persons and groups throughout the nation, will provide generously for the perpetuity of the Foundation, even to a greater extent than the initial effort. Experience also has shown that through medical research adequately supported over a period of years, good financial returns oftentimes may be realized on resulting discoveries and improvements. Full provision to receive such benefits is made in the Articles of Incorporation of the Oklahoma Medical Research Foundation.

The ten-year budget of \$3,000,000 has been divided into three divisions as follows:

1. Building	\$ 600,000
2. Maintenance	236,000
3. Research	2,164,000
(Equipment, moveable, large apparatus, expendable materials, care of special patients full and part-time salaries of a personnel of apprx. 40 scientists and technical and non-technical assistants.)	

Following a very thorough investigation, including inspection visits to other research foundations, the building committee recommended a structure which will cost \$790,000. This figure includes the cost of basic equipment. Completion of this Building is scheduled for June 1, 1950.

V CONTEMPLATED FIELDS OF RESEARCH

It is anticipated that the minimum ten-year budget as set forth above will provide initial investigations in medical, dental, pharmaceutical, and nursing fields. These fields of investigation may include research in such specific grouping as: degenerative diseases (heart, circulatory system, kidney, liver, and various other organs of the body); infectious diseases due to bacteria and viruses (infantile paralysis, influenza, cold, rabies, etc.); cancer, experimental medicine and surgery; hereditary anomalies; geriatrics (diseases of the aging); antibiotics and other new drugs; and diagnostic therapeutic procedures.

VI CONCLUSION

The Foundation has been the recipient of two outstanding gifts, one a plot of land consisting of approximately two acres located adjacent to the University of Oklahoma School of Medicine, by the State Legislature; the other, a pledge by the Variety Club of Oklahoma of \$600,000 to construct the research institute building.

With the above mentioned support plus all the allied professional groups' support, the successful conclusion of the three million dollar founding campaign is assured.

The people of Oklahoma under the leadership of some of the State's best known executives expect to complete the raising of the budget by February 1, 1950. At that time the financial security of the Foundation should be assured.

With the excellent leadership provided, it is felt by all concerned that this goal will be exceeded.

OKLAHOMA TUBERCULOSIS ASSOCIATION

Affiliated with the National Tuberculosis Association

22 Northwest Sixth St.—P. O. Box 1661

Oklahoma City, Okla.

Telephone 2-1400

Carl Puckett, M.D., Managing Director

TUBERCULOSIS ASSOCIATION

Financed by the sale of Christmas Seals, the aim of the Oklahoma Division of the National Tuberculosis Association is eradication of tuberculosis.

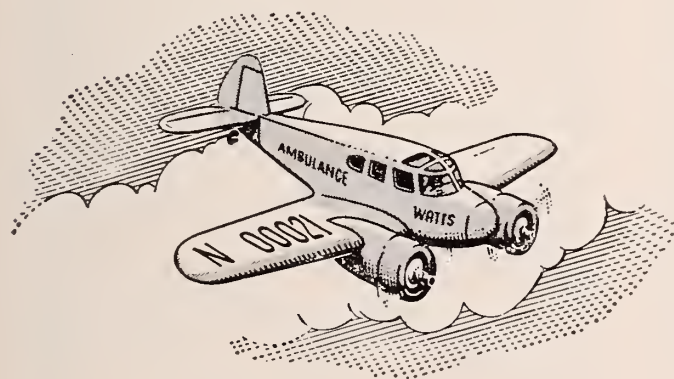
Program of the Oklahoma Division includes prevention of tuberculosis through health education, control through case finding and diagnostic clinics, and leadership in promotion for care of patients by government through county health departments and state sanatoriums. Each county of the state has its own society operating under supervision of the state association. Local programs stress health education and organization under direction of executive secretaries where funds permit.

Projects include furnishing educational supplies and tuberculin to physicians. Monthly bulletins on tuberculosis are also mailed to all physicians. The association provides a counsel service for patients and contacts and makes the referrals to physicians or established clinics. Literature, posters and moving pictures are used by the health education branch of the association in teaching.

While most x-ray films used in clinics throughout the state are provided from county Christmas Seal funds, in general these funds are used in public health procedures and measures and in cooperation with health departments.

The state Tuberculosis Association gives financial cooperation in mass x-ray surveys for discovery of tuberculosis, public health nursing, and chest clinics and follow-up in counties without health departments. Pamphlets for instruction and guidance of tuberculosis patients and literature for the public on prevention of tuberculosis are provided through county health departments or county tuberculosis associations.

Tuberculosis associations promote standard public health departments in keeping with methods approved by organized medicine; the program conforms to the plan outlined in Section Eight on "Health Education" of the Program of the American Medical Association for the Advancement of Medicine and Public Health. These funds are not used to finance responsibilities of government except during periods of demonstration. The aim is promotion of sound governmental procedures in meeting the many angles of the problem of tuberculosis.



Twin engine airplane ambulance providing a safe, fast and comfortable mode of transportation for the sick and injured. Services of Registered Nurse available when requested or desired.

Costs are comparable to auto Ambulances.

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WATTS AERIAL AMBULANCE



GOVERNMENTAL HEALTH AND WELFARE AGENCIES

THE UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE AND UNIVERSITY HOSPITALS

800 Northeast 13th Street, Oklahoma City, Okla.

Telephone 7 1511

Mark R. Everett, Ph.D., Dean
School of Medicine

Robert C. Lowe, M.D., Medical Director
University Hospitals

The maintenance and operation of the University Hospitals in Oklahoma City are justified on the basis of medical education. The primary functions of the Hospitals relate to the instruction of undergraduate students in medicine and in nursing, and to the training of graduate students in medicine (interns, assistant residents, residents, and fellows). Opportunities are provided, in addition, for the training of persons in certain auxiliary fields, as medical technology, X-ray technology, and dietetics. Obviously, in fulfilling these functions, a significant service factor develops; but it is emphasized that the service factor, important as it is recognized to be, is a function secondary to the primary educational obligation.

The service factor in the teaching hospital requires certain development frequently not understood, sometimes misunderstood or misinterpreted by those who are unaware of the educational obligations or who are interested in no other function than the service factor, so that this statement is presented in an effort to clarify certain relevant points in order that practicing physicians of Oklahoma may interpret to their patients the opportunities for and the limitations of hospital care offered in the University Hospitals.

As the Hospitals are set up, certain types of patients are admitted through agencies set up by statute, by following procedures established by the agencies or by statute (Crippled Children's Commission, State Veterans Department). The limitations of geographic location of the physical plant, of the budget for maintenance and operations, of standards in medical care, in medical education, and in nursing education, and of personnel, also operate to make it possible only to render certain services. (There are available no beds for the care of psychiatric patients, no beds for the care of tuberculous patients, no beds for the care of patients, adults, adolescent, or child, ill with any of the usual communicable diseases except as these are especially set up and provided for to meet an emergency, as in an outbreak of acute anterior poliomyelitis, for example. For obvious reasons, the care of obstetrical patients under ordinary circumstances is limited to those of residence in a zone of short radius around Oklahoma City. Similarly, emergency accident admissions are limited by various factors including transportation, physical facilities, et cetera.)

Before presenting rather detailed information relating to the procedures involved in hospital patients admission, it seems appropriate to emphasize the point that it is highly important that arrangements for the admission be made in advance (by telephone in emergencies, by mail if time permits) of the patient's appearance at the Hospitals for admission, by direct communication with the Office of the Director of Out-Patient Clinics, attention Admissions Office, University Hospitals, 800 N. E. 13th Street, Oklahoma City 4, telephone: Oklahoma City 7-1511.

The procedure related to the admission of patients

to the Oklahoma Hospital for Crippled Children, to the University Hospital, and to the Out-Patient Clinics are outlined below.

On the basis of the new Oklahoma Crippled Children's Act (HB144), provision is made for the medical care of unmarried dependent children under twenty-one years of age. Under this act the Oklahoma Hospital for Crippled Children, as well as other hospitals of the state accredited by the Crippled Children's Commission, are required or authorized to care for children whose families cannot pay for the necessary medical and surgical treatment.

The appropriate application forms are obtainable from the County Judge or the local Department of Public Welfare. They should be filled in by the local examining physician (private or county health officer), signed by the responsible parent or guardian and signed by either the County Judge or the County Welfare Director. The application should then be submitted to the Oklahoma Commission for Crippled Children.

When the local physician appraises the condition an emergency, authorization for immediate hospitalization can be secured by telephone communication with the Admitting Office. The appropriate papers are then brought along with the patient. It is always necessary that the responsible parent or guardian accompany the child to the Hospital. In the case of smaller children it is necessary that someone familiar with the onset and course of the illness accompany the child to give the historic facts. The local physician's own observations will be of great help in most instances. In addition, specific permission authorizing appropriate operative procedures is necessary.

Since the operating capacity of the hospital is not unlimited, the Staff and the Admitting Department have the responsibility of selecting patients to be admitted to the In-Patient Services. In the interest of carrying out this responsibility the initial study of each patient is carried out in the Clinics. It is for this reason that the patient is given an appointment to the Clinics whenever this is possible without jeopardy to him or her. If the home physician or health officer feels that the patient presents an emergency problem, arrangements should be made by telephone communication with the Admitting Office. In some instances these arrangements will necessarily be delayed or may not be possible within the required time. In the latter case suggestions as to possible arrangements elsewhere will be made.

The primary qualifications for admission include the provisions that: (1) the patient and his illness fit into the undergraduate medical teaching program of the School of Medicine, (2) active medical or surgical treatment is necessary and there is a good prospect of aid to the patient. It is not possible to admit patients who require only nursing care, nor to admit those with chronic illnesses in which the possibilities or treatment are recognized to be problematical. It is always neces-

sary for the Hospitals to have patients whose problems are of teaching value. This requires that there be variation in clinical problems and an avoidance of overweighting of services.

The more immediate the need the earlier the patient will be admitted. It is only by the selection of patients that the service and teaching functions of the Hospitals can be carried out, and at the same time avoid, insofar as possible, the disappointment of expectations that cannot be fulfilled.

The Main (University) Hospital is set up for the care of indigent adult patients. The authorization for such care is obtained from the County Commissioners. The local physician or health officer wishing to refer a patient to the Hospital can facilitate admission materially by providing all pertinent information requested in the County forms (Application for Admission to the University Hospital or Clinics). These forms are available from the County Commissioners' Offices. Upon completion they should be mailed to the Admitting Office of the University Hospital. With the aid of the social and medical information outlined therein, the necessary arrangements will be made and the patient will be notified as to the day and time that the clinic to which he should come meets. It will be recognized that this appointment method is necessary when it is understood that between 40 and 50 thousand patients are seen in the University Hospitals' Out-Patient Clinics each year.

The Clinics of the Hospitals have three service functions: (1) the diagnostic study of patients referred by the attending physician, (2) the ambulatory care and follow-up of patients when such care is feasible, and (3) the selection of patients for hospitalization. All of these functions form the basis for a very important aspect of the teaching of students of medicine in the third and fourth years of the course. It is the nearest approach to actual office practice that can be offered the undergraduate student of medicine in the institution.

Due to limited personnel, the large patient load, and the teaching requirements placed on the Staff (primarily voluntary), it is not always possible to send to the attending physician detailed summaries of the finding and treatment in each patient. All inquiries can and will be answered fully, so the referring physician should not hesitate to ask for them if he is particularly interested. Whenever possible, and always when requested, the patient will be referred back to his home physician with the results of the study and recommendations for continuing treatment.

The Out-Patient Clinics do not have a pharmacy to fill prescriptions. The Social Service will help in making arrangements with the County Commissioners to supply medicines as recommended by the Staff. This is true also in the case of special diet requirements that cannot be met by the patient himself. The referring physician, likewise, should enlist the Commissioner's aid.

Because of a total lack of facilities in the University Hospitals for the care of such patients, in certain types of clinical problems (such as tuberculosis), the patient will be referred back to the attending physician and local health department to arrange for care in one of the State Sanatoria. The same course is followed in psychiatric disturbances requiring institution-

alization. The limited time available from the psychiatric staff, the large number of cases, and the time required for psychotherapy, make it impossible for the Neuro-psychiatric Clinic to offer anything but diagnostic and short term simple therapeutic aid.

When hospitalization in the University Hospitals is recommended every effort is made to arrange for it on the basis of the Staff's impression of the patient's needs. Real emergencies are admitted without delay. Occasionally it is necessary to arrange for hospitalization elsewhere. If the problem is not emergent and a bed is not available, the patient will be sent home and notified at a later date to return for admission to the Hospital.

For the information of physicians and of their patients, it seems appropriate to invite attention to certain other miscellaneous points:

(1) The University Hospitals have no facilities or funds through which the transportation of patients from home to hospital or from hospital to home may be provided. In some instances (crippled children, cancerous patients, poliomyelitic patients), local agencies may be able to provide transportation through specific arrangements with the interested and responsible group (Crippled Children's Commission, Local Chapter of the Oklahoma Division of the American Cancer Society, Local Chapter of the National Foundation for Infantile Paralysis).

(2) Certain medicolegal aspects of the care of minors or children make it necessary that all patients under the age of 21 years be accompanied by parents or guardians.

(3) When the attending physician sends the patient in to the University Hospitals for admission or for Out-Patient Clinic care, it is expected that he provide the Admitting Office with social data and other relevant information, including at least a summary of history, of physical and clinical findings, of impression or diagnosis, and of treatment instituted. The Hospitals, in return, will make every effort to supply the physician with a summary of the findings, of diagnosis, of treatment, and of recommendations as soon as possible. (There have been many complaints of the Hospitals' not providing the patient's physician with such a report, and they probably have been justified fully in many instances. Two factors operate to give rise to such delays: (a) the attending staff man in the University Hospitals is nearly always a voluntary teaching staff member whose time is at a premium, and (b) inadequacy of secretarial service delays getting letters out after dictation).

The University Hospitals, even if they were doubled in size and adequately financed for maintenance and operation, cannot possibly render service to all indigent Oklahomans needing hospital care. The teaching needs of the Hospitals, both in medicine and in nursing, act to limit still further the opportunities of serving patients. It is the hope and ambition of the Hospitals' staffs to render the maximum of service, however, both as to quality and quantity, to the best of its ability within the limits of function, responsibility, funds available for operation and maintenance, and physical plant. Mutual understanding of problems involved should permit more effective service.

In 1937 Federal expenditures were equivalent to the income of all the people of Pennsylvania and Missouri. In 1947, it took an amount equal to all the income of all the people in 25 states to pay the cost of Federal Government for one year . . . an increase of 500%.

STATE DEPARTMENT OF HEALTH

3400 North Eastern

Oklahoma City, Okla.

Telephone 58-7586

Grady F. Mathews, M.D., Commissioner of Health

The Oklahoma State Board of Health is policy forming, promulgates rules and regulations, and appoints the Commissioner of Health, the executive officer of the State Department of Health. For ease and efficiency of administration, divisions have been created within the State Department of Health for: Local Health Service, Public Health Nursing, Venereal Disease Control, Tuberculosis Control, Epidemiology, Maternal and Child Health, Preventive Dentistry, Sanitation and Public Health Engineering, Laboratories, Cancer Control, Mental Hygiene, Health Education, Statistics and Vital Records, Hospital Licensure and Construction, and Fiscal Services and Personnel.

The greatest service rendered by these divisions is that of advising local health departments in the development of their programs. However, some of the more highly technical services, such as engineering, specialized epidemiology, analysis of vital statistics, industrial hygiene and certain public health laboratory examinations are rendered on a statewide basis without necessarily being made a part of the functions of a local health service. The activities of the various divisions are given in more detail in the sub-headings which follow.

Local Health Services

The most effective and efficient way of rendering preventive health service to the people of a given area is through an organized full time health department. The soundness of this plan has been attested by the American Public Health Association, the American Medical Association and the Oklahoma State Medical Association. A local health department is an organization directed by a full time public health physician with a complement of nurses, sanitarians and clerks. One nurse to 5,000 population and one sanitarian for 15,000 is needed. It is the policy not to start the service with less than one nurse to 10,000 and one sanitarian to 25,000 or 30,000 population.

The basic activities carried on by full time health department are: vital statistics; communicable disease control, including venereal disease and tuberculosis; maternal and child health, including school health; sanitation, general sanitation and the supervision of water, milk and food; and health education. More recently, programs for mental hygiene; the epidemiology of cancer, heart disease and other chronic diseases; industrial health; and accident prevention are coming to be recognized as functions of local health services.

The Division of Local Health Service promotes the organization and development of local health departments throughout the state. Health Departments are in operation in the following counties and cities:

Health Department	Address
Blaine County	Watonga
Bryan County	Durant
Cleveland County	Norman
Comanche County	Lawton
Creek County	Sapulpa
Grady County	Chickasha
Hughes County	Holdenville
Kay County	Ponca City
Kingfisher County	Kingfisher
Kiowa County	Hobart
LeFlore County	Poteau
Logan County	Guthrie

Muskogee County	Muskogee
Oklahoma City	Oklahoma City
Oklahoma County	Oklahoma City
Okmulgee County	Okmulgee
Ottawa	Miami
Payne County	Stillwater
Pontotoc County	Ada
Pottawatomie	Shawnee
Seminole	Wewoka
Tulsa City-County	Tulsa

Districts

Adair, Cherokee, Sequoyah Counties	Tahlequah
Beaver, Cimarron, Texas Counties	Guymon
Beckham, Custer Counties	Clinton
Caddo, Jefferson, Stephens Counties	Anadarko
Carter, Marshall Counties	Ardmore
Choctaw, McCurtain Counties	Hugo
Delaware, Mayes, Wagoner Counties	Wagoner
Garvin, Murray Counties	Pauls Valley
Latimer, McIntosh, Pittsburg Counties	McAlester

Health Education

Good health is a joint responsibility of the individual and the community. A community is comprised of people of all ages, various religious groups, professional groups, people of different financial, educational and cultural standards.

Good health is acquired and maintained only by the observance of certain standards and regulations — proper diet, wholesome recreation, clean living and a proper mental attitude toward life.

The information regarding the forming of correct health habits is disseminated through education and training. The state and local health departments accept their rightful share of leadership in promulgating this program of health education, in cooperating with state colleges in conducting workshops which offer training in health education to teachers. They work with the State Department and with schools in planning and conducting suitable and proper health education activities.

Speakers are furnished for various groups and gatherings. This division cooperates with other agencies in providing refresher courses for doctors and nurses and in planning and conducting training courses for food handlers.

A weekly news letter is prepared and distributed to more than 400 newspapers in the state. A monthly bulletin is published which contains pertinent facts about public health.

This division arranges radio broadcasts for the various divisions. A film library is maintained and films are available for showings over the state.

There is a general reading library of approximately 1400 volumes on different phases of public health. A periodical file is maintained which consists of 100 professional and technical magazines.

Preventive Dentistry

An educational and clinical program is conducted principally in organized local health areas. The division provides consultation service to the dental and medical professions on common problems. Instances of this nature are:

1. The dental implications of venereal disease. Studies were made establishing the degree of correlation between dental clinical findings and subsequent blood tests on the same patients. The objective is to determine

whether a diagnosis of Hutchinson's teeth can be made with sufficient selectivity as to be a rapid, painless, accurate and inexpensive case selection method for congenital syphilis. The dental diagnosis would be confirmed by blood tests.

2. Dental epidemiological problems. Vincent's infection in epidemic form is the usual occasion for consultation under this classification.

3. Dental caries control: (a) Lacto-bacillus acidophilus salivary counts will be made to determine the degree of caries activity. Consultation on nutritional control of dental caries is available. (b) Consultation on the role of fluorine as a caries control agent is available and includes a consideration of communal water supply, fluorine therapy for individual patients, etc.

Tuberculosis Control

Physicians are required by law to report all cases of tuberculosis.

Two tuberculosis sanatoria, one at Talihina and one at Clinton, are maintained by the state. No charge is made for hospitalization. Application blanks for admission may be secured from the local health department or the county clerk's office. Applicants must have been residents of Oklahoma for one year.

Negro patients are hospitalized only at Western Oklahoma Tuberculosis Sanatorium, Clinton.

War veterans with tuberculosis are treated at the State Veteran's Hospital, Sulphur. Admission information may be secured from the Superintendent.

Indians are treated at two institutions operated by the Bureau of Indian Affairs. If the applicant is of the Five Civilized Tribes jurisdiction, he must show that he is at least one-half degree of Indian blood. If the applicant is a minor, he must be one-fourth, and eligibility ceases upon his reaching majority.

A tuberculosis case-finding program is carried out under this division. Regular chest x-ray clinics are held in counties with full time health departments. Special clinics are held periodically in other areas of the state. In addition, a county-by-county mass x-ray survey program is being conducted.

Epidemiology

This division has as its function the work of coordinating and directing efforts toward the control of communicable disease within the state. As a basis for control procedures the State Department of Health has adopted the 1945 revised rules and regulations recommended by the American Public Health Association and published in their manual "The Control of Communicable Disease".

Reportable and Quarantinable Diseases:

Cholera, diphtheria (including membranous croup), plague (including bubonic, septic, and pneumonic), poliomyelitis, scarlet fever (scarletina, scarlet rash), smallpox (variola), epidemic cerebro spinal meningitis.

Reportable and Isolated Diseases:

Anthrax, chickenpox, dysentery bacillary, encephalitis, infectious (lethargic and nonlethargic), favus, glanders, gonorrhea, influenza, leprosy, measles, meningococcus meningitis (cerebro-spinal fever), mumps, paratyphoid fever, psittacosis, septic sore throat, trachoma, tuberculosis (pulmonary), typhoid fever, whooping cough, yellow fever.

Reportable Diseases:

Dengue, conjunctivitis, acute infectious (of newborn, not including trachoma), dysentery, amebic; hookworm disease, malaria, rabies, Rocky Mountain spotted fever, tetanus, trichinosis, tuberculosis (other than pulmonary), tularemia, typhus fever, undulant fever (brucellosis), filariasis, ascariasis, hemorrhagic jaundice (spirochetosis icterohemorrhagic, Weil's disease), impetigo, rat bite fever (sodoku), relapsing fever, ringworm, scabies (itch), Vincent's infection (Vincent's angina), trench mouth, yaws, botulism, food infections and poisonings, pellagra, erysipelas, pneumonia (lobar), syphilis, gonorrhea, chancre, lymphogranuloma, granuloma inguinale, cancer.

Reporting of Cases:

The physician is requested to report to the health officer in writing within 24 hours all cases of communicable diseases. All suspected cases must be reported and treated as positive until a clear diagnosis can be made. Neglect or refusal of a physician or householder to report cases of communicable disease, makes him liable to a penalty.

Maternal and Child Health

The director of maternal and child health, the consultant nurse, and the nutritionists act as consultants to the local health departments in helping them to develop their maternal and child health programs. The staff is also available for consultant services to hospitals in establishing standards for the care of mothers and babies.

The nutritionists offer a dietary service to such institutions as child-caring homes, maternity homes, and small hospitals. They are available also to state agencies who wish to develop nutritional programs.

This division, at appropriate intervals, in cooperation with the University of Oklahoma School of Medicine and Nursing, arranges for postgraduate short courses in obstetrics and pediatrics for physicians and nurses throughout the state.

A series of prenatal letters has been prepared by this division and is mailed out at monthly intervals to expectant mothers whose names have been furnished either by physicians or by county health departments throughout the state. These letters are designed to emphasize the importance of prenatal care and to give the expectant mother certain information in the way of health habits during pregnancy, the need for a blood test, and diet. The letters sent her during the latter part of her pregnancy deal with infant care and the need for a postpartum medical examination.

The county health department nurses hold classes and visit expectant mothers in their homes to supply information on prenatal care, teach them to eat proper foods, and to see their physicians regularly. The nurse also visits the patient in the home soon after delivery to demonstrate to the attendant proper postpartum care and the care of the newborn infant. In some of the counties, in cooperation with the medical association, clinics have been set up for medical examination of antepartum and postpartum patients.

In counties with fulltime local health departments, infant and preschool clinics are set up in specific centers. Mothers are invited to bring children in for medical examination and health supervision when these children are not being seen regularly by their own physicians. An educational program of nursing follow-up in the homes is carried on to supplement the information supplied to the mothers at the clinics and to urge others in more favorable financial circumstances to see their own physicians for health supervision.

The school health program includes physical examination and inspection of certain grades and of children specially selected by the teachers. A special effort is made to reach children entering school for the first time. Children with defects are referred to their own physicians. Cases with inadequate funds are referred to available facilities such as the Crippled Children's Commission, welfare agencies and voluntary agencies for correction.

A premature training center has been established at the University Crippled Children's Hospital on a co-operative basis with the Oklahoma Schools of Medicine and Nursing and the State Department of Health. This center will provide training of professional personnel for the hospital and for other hospitals throughout the state.

Mental Hygiene

The Mental Hygiene program is an educational one. Numerous lectures on Mental Hygiene are given to civic clubs, schools and churches. Discussions with high school teachers and college professors are held on this subject.

Post-graduate seminars have been held for all medical men in the state, under the sponsorship of the Oklahoma State Medical Society, the State Department of Health and the Oklahoma University School of Medicine. Noted psychiatrists have conducted these seminars in various towns over the state.

An all-purpose mental hygiene clinic is in operation in the out-patient department of the University of Oklahoma School of Medicine. The clinic is staffed by the faculty of Neurology and Psychiatry of the School of Medicine and financed by the State Department of Health.

Pierre the Pelican, the Louisiana bird, is visiting parents of firstborn children in five counties: Carter, Pottawatomie, Beaver, Cimarron and Texas. This series of 12 monthly letters is designed to give parents of first children a better emotional understanding of the growing child.

Much assistance is given to the Oklahoma Committee for Mental Hygiene and the Community Mental Hygiene Clinic.

In September, 1949, the Tulsa Child Guidance clinic began operation with the financial assistance of the State Department of Health.

Cancer Control

A law passed in 1949 authorized the State Department of Health to create a cancer control division to promote a program for prevention of cancer; to prescribe rules and regulations for the operation of the division, such rules and regulations to specify to what extent and on what terms and conditions the division will provide financial assistance or service to medically indigent persons for the diagnosis and treatment of cancer in any approved clinic or hospital in the state; to pay hospitals a per diem not to exceed 85% of the average patient-per-day cost for the hospitalization of medically indigent patients suspected of having cancer, such hospitalization to be primarily for diagnostic service not for terminal hospital care; to accept assistance from any voluntary or official state or national organization in carrying out the program.

Cancer was made a reportable disease by Health Department regulation passed in 1947.

Federal allotment, fiscal year ending June 30, 1950	\$62,307.00
State appropriation, 2½ year period, June 3, 1949-December 3, 1951	30,000.00

Cancer detection examination service is furnished to about thirty counties each year by a mobile cancer detection clinic financed by the Oklahoma Division of the American Cancer Society.

There are cancer clinics at the University of Oklahoma Hospitals and at St. Johns Hospital, Tulsa, and one in Muskogee, operated in the County Health Department by a committee of the County Medical Association and financed by the State Department of Health and the American Cancer Society.

A cancer register has been maintained by the State Department of Health since October, 1947.

Free tissue diagnostic services are provided by the State Department of Health for indigents through a system of reimbursement to institutions or physicians for services rendered.

Cytology test services are available at the University of Oklahoma Hospitals, Oklahoma City, and the St. Johns Hospital, Tulsa.

The chief facilities for the care of advanced cancer patients desiring care outside their own homes are the hospitals and nursing homes. The Oklahoma Division of the American Cancer Society is at the present time furnishing medicines and dressings which are distributed by doctors, hospitals and local health departments. It is planned to expand this program during the next year and include home nursing care.

Statistics and Vital Records

Registration:

The State Department of Health collects and keeps on permanent file original certificates for live births, stillbirths, and deaths occurring in the State of Oklahoma. Laws and regulations require that a birth cer-

tificate be filed with the local registrar of vital statistics within ten days from the date of birth. Stillbirth or death certificates must be filed with the local registrar within 3 days from the date of stillbirth or death. Standard certificate blanks are furnished by the department of the local vital statistics registrar to all persons responsible for registering these events.

Delayed Birth Registration:

Birth certificates not filed within six months from the date of birth are considered "delayed" and are stamped as such by the State Registrar. A person whose birth has not been registered before his fourth birthday must use a special certificate and follow a special procedure. Applications for instructions should be made to the State Registrar in the State Department of Health.

Certified Copies:

Certified copies of original birth, stillbirth, and death certificates on file in the Department are issued upon the signed request of a qualified applicant for a fee of 50¢ for each certified copy issued. The fee is also charged for each search of the records even though no certified copy is issued. Only the State Registrar is authorized to issue certified copies.

Public Health Statistics:

The public health statistics service collects, compiles, tabulates, and analyzes live births, stillbirths, deaths, reported cases of communicable disease, reported cases of malignant neoplasms, and venereal disease clinic activities. Statistical analysis of other public health data is made on request of other divisions within the State Department of Health and related organizations and agencies outside the Department.

Two annual publications of public health statistics information are issued. These are: PUBLIC HEALTH STATISTICS OF OKLAHOMA, PART I — REPORTABLE DISEASES, and PUBLIC HEALTH STATISTICS OF OKLAHOMA, PART II — BIRTHS AND DEATHS.

Fiscal Services and Personnel

The operations of the Oklahoma State Department of Health are financed by funds appropriated by the State Legislature and by Federal funds administered by the Public Health Service and the Children's Bureau.

The Public Health Service administers General Health, Venereal Disease, Tuberculosis Control, Cancer Control, Mental Hygiene, Industrial Hygiene, Heart Disease Control, Water Pollution Survey, and Hospital Construction funds.

The Children's Bureau administers Maternal and Child Health funds. With the exception of the General Health funds, administered by the Public Health Service, all of these funds are special-purpose funds and can be expended only for indicated purposes.

The Federal Funds must be matched in varying proportions by state and local funds. A sizeable part of state and federal funds are utilized to supplement local funds in financing local health departments. Every project utilizing Federal funds must be approved by the Federal agency administering such funds.

The State Department of Health operates under a Merit System of personnel administration. This is required by the Federal agencies as a prerequisite to receipt of Federal funds. Under such a system, employees are selected on a basis of competitive examination.

Laboratories

Laboratory service for the diagnosis and control of communicable disease is furnished through this division. This service is provided not only for the diagnosis of certain communicable diseases, but also for the release of patients from quarantine (diphtheria, etc.) and for the determination of carriers (typhoid, etc.)

Examinations are made on a large number of milk and water samples. Bacterial counts on glassware and utensils for restaurant sanitation are made. Bacterial and chemical examinations are made for food poisoning and to assist in the investigation of epidemics.

Laboratory service for communicable disease specimens is available as follows: diphtheria, microscopic and culture; dysentery, amoeba, microscopic and cul-

ture; feces specimens — dysentery, bacillary — culture, feces; gonorrhea, microscopic and cultures; malaria, microscopic, blood slide; meningitis, microscopic and culture; parasites, intestinal, microscopic, feces; pneumococci, typing, sputum; rabies, microscopic, animal heads, brain tissue; spotted fever, agglutination and animal inoculation, blood; streptococcus, cultures; syphilis, Wasserman and other tests (blood and spinal fluid), darkfield examinations; tuberculosis, microscopic and culture, sputum, etc.; tularemia, agglutination tests, blood; typhus, agglutination tests, animal inoculations, blood; typhoid agglutination tests, cultures (blood, feces and urine); undulant fever, agglutination tests (blood); Vincent's infection, microscopic. Total protein and colloidal gold determinations are made on spinal fluids. Quantitative Kahn tests on blood specimens and quantitative Kolmer on spinal fluids.

Cultures on milk for mastitis and streptococci typing and cultures and typing of salmonella, shigella are made.

Complement fixation tests are available for rickettsial diseases; ie, Rocky Mountain spotted fever, typhus, rickettsialpox and Q fever.

Rh testing is provided for patients attending health department prenatal clinics and to certain indigent and low-income cases.

Prenatal blood tests are made and certificates are issued. Prenatal blood tests are made as required by law. The evaluation and approval of private, clinical and hospital laboratories for prenatal and premarital blood testing is done by the laboratory as required by law.

The laboratory also provides for chemical analysis of food, drugs, water, milk, alcohol and toxicological specimens.

The following biological products are prepared and distributed to physicians without cost; typhoid vaccine, diphtheria toxoid, alum precipitated diphtheria toxoid, pertussis, Schick test toxin, old tuberculin, bismuth subsalicylate in oil, sterile distilled water and diphtheria and pertussis combined.

Special containers for the collection and mailing of specimens will be furnished upon request. Any information desired in regard to the collection of specimens, special tests, or the interpretation of reports will be furnished upon request. Branch laboratories are located at Elk City, Hugo, Lawton, Miami, Muskogee and Wewoka.

Laboratory Consultant Service: A well trained and experienced medical technologist is available for laboratory consultation. On request, she will be sent to any hospital or clinic in the state to spend a week or more with the laboratory technician there. The purpose of this service is to improve the general quality of the local laboratory services, to improve old techniques and to introduce new techniques and procedures. This service is available without cost.

Short refresher training is available for qualified laboratory workers in the Central Laboratory in Oklahoma City. This training is offered in Serology and Bacteriology. Anyone interested should write to the Bureau of Laboratories, Oklahoma State Department of Health, Oklahoma City, for additional information.

Sanitation and Public Health Engineering

Water and Sewage:

The Statutes of Oklahoma provide that all water works, sewerage and sewage treatment projects must be submitted to and approved by the State Department of Health before any construction work or contract for construction is awarded for such projects.

The purpose and objective of the water and sewage division is to maintain the health of the public at the highest possible standard by the prevention of disease through good sanitary engineering practices. This work is accomplished by consultation with individuals, schools, companies, corporations, towns, cities and other local and state organizations on the following subjects: water supply and treatment, sewerage and sewage disposal and swimming pools. Information on these subjects,

pertaining to design, construction, operation, maintenance and recommended practices may be obtained upon request to the division.

Industrial Hygiene:

The purpose and objective of the industrial hygiene program is to maintain the health of the working population at the highest possible standard through good industrial health practices. This work is accomplished by consultations with management, labor, practicing physicians, and others, and through inspections of plant processes and field and laboratory work.

This program provides chemical and engineering consultations on industrial health problems; investigates occupational disease cases reported by physicians; assists in the planning or expansion of plant, medical and nursing services; surveys manufacturing plants throughout the state for conditions or processes which may be harmful to health; makes field studies of work-room environments; maintains laboratory facilities for analysis of samples collected in the field; reports findings of field surveys and studies to industry and makes recommendations for the control of health hazards involved; follows up recommendations; examines and approves plans and specifications for industrial exhaust ventilation systems; serves as a clearing house for information on industrial health subjects; maintains an extensive reference library; and distributes pamphlets and posters on industrial health subjects.

General Sanitation:

In this category are grouped a number of activities dealing with various phases of sanitation, such as swimming pool sanitation, frozen food locker plants, bedding control, rodent control, refuse and garbage disposal, selection and training of sanitarians for local health units, etc.

Recent legislation requires the submission of plans and specifications for swimming pools, frozen food locker plants and slaughter houses operated in connection therewith. Rules and regulations pertaining to these subjects are available upon request.

Bedding control legislation requires the approval and licensing of all bedding manufacturing and renovating plants and the labeling of all bedding offered for sale in the state.

Consultant service is also available to any city or town official on problems related to rodent control, and garbage and refuse disposal.

Malaria Control:

The malaria control program is at present sponsored by the State Department of Health in cooperation with the Public Health Service through the Communicable Disease Center Activities. The program is confined to the counties having the highest malaria death rates during the five-year period from 1938 to 1942. This service has been gradually expanded to include operations in Atoka, Bryan, Choctaw, Haskell, Jefferson, Latimer, LeFlore, McIntosh, McCurtain, Muskogee, Pittsburg, Pushmataha and Sequoyah counties. Consultative service on community fly control programs has become an important function of this section. Approximately 2300 gallons of DDT concentrate was furnished at cost to community fly control programs during the 1949 season.

Milk control:

A new law relating to fluid market milk, designating the State Department of Health as the enforcement agency, was enacted by the last (1949) legislature. The new law provides for proper labeling, prohibits and sets minimum standards for the production, processing and grading of milk products, and further provides that cities and towns may adopt higher standards. Additional trained personnel have been employed to carry out the provisions of the law and furnish advisory service to officials of municipalities and institutions and to the milk industry of Oklahoma.

Food and Drugs:

This division is responsible by legislative action for the sanitation inspection of hotels, food and drug handling establishments, food and drug manufacturing

plants, the registration and licensing of such establishments, the abatement of public health nuisances and regulatory control of food and drug products.

Advisory service is given officials of cities and towns relative to local sanitation ordinances. Inspections and investigations are made and samples of food are collected for laboratory analysis in food poisoning outbreaks. Public and private institutions that may, in the opinion of the medical profession, be involved in the spread of disease of public health significance are inspected. Traffic in illegal or dangerous drugs is investigated. Individuals and/or firms are assisted in planning construction of food manufacturing and processing plants.

Hospital Licensure and Construction

This division was created by law in 1945 to administer the regulation and licensing of hospitals and related institutions, to inventory and survey all hospital facilities and to implement the Federal-aid Hospital Construction Program as provided in Public Law 725 (formerly the Hill-Burton Bill).

Annual inspection and licensing of hospitals and related institutions began on July 1, 1946, in accordance with the provision of the State License Law. A compilation of rules and regulations made by the American Hospital Association revealed that the Oklahoma standards for licensure are generally in agreement with those of other states. The program is based on a gradual increase in compliance with the adopted standards through an educational and service policy rather than a revolutionary enforcing process. Concurring in the opinion of the Federal Hospital Advisory Council, the American Hospital Association and other interested hospital groups, it is believed that a program involving the good will and cooperation of the hospitals will provide a more substantial and effective manner of improving hospital facilities and hospital care.

All rules and regulations concerning inspection and licensing of Oklahoma hospitals have been, and will be in the future, adopted by the State Board of Health on recommendation of the Oklahoma Hospital Advisory Council. The Council is composed of the Dean of the Medical School of the University of Oklahoma, the Chairman of the State Board of Public Affairs, and of representatives of the Oklahoma State Medical Association, Oklahoma State Hospital Association, Oklahoma State Nurses Association and Oklahoma Osteopathic Association. These rules and regulations are so detailed that it is impossible to include them in the limited space available in this publication. For the convenience of any physicians interested in further details in regard to license laws and standards for hospitals and related institutions, such information may be secured directly from the State Commissioner of Health, Oklahoma State Health Department, Oklahoma City, Oklahoma.

An initial survey of hospital facilities was completed in the fall of 1945, revealing the size, character and resources of all existing hospitals and estimating the need for additional facilities to provide adequate care.

After approval of the State Plan by the Surgeon General on July 25, 1947, a statewide hospital construction program began its first fiscal year of operation. As construction activities proceed, the additional need is obviously affected, necessitating an annual re-determination for the need of hospitals and related facilities. Therefore, the State Plan is adjusted annually to provide a construction program designed to fulfill the unmet need.

It is expected that through the additional new facilities and the continuing effects of a coordinated licensing program, Oklahoma will have accomplished its goal of providing good hospitals throughout the State by the time the construction program is terminated.

Venereal Disease Control

The Venereal Disease Control program in Oklahoma as it operates under the State Department of Health is designed to check the spread of venereal diseases, to find the cases, and to arrange for treatment, either by private physicians or in the Oklahoma Medical Center.

The State Department of Health will furnish to private physicians certain drugs which are necessary in treating venereal diseases. In order to receive these drugs, the physician is expected to report the cases treated with drugs so furnished. Diagnostic laboratory service is also available to physicians regardless of the patients' ability to pay.

The State Department of Health employs health officers, public health nurses and lay investigators who are trained in all phases of venereal disease epidemiology and their services are available to the private physician upon request.

The State Department of Health operates a treatment hospital on the grounds of the University Hospital, Oklahoma City, for infectious syphilis. Facilities of this hospital are available to physicians for either paying or indigent patients.

All physicians are expected to make a written report of the cases of venereal disease diagnosed by them or cases which may be under their care. This report is made to the State Commissioner of Health on forms prescribed and furnished by the State Board of Health.

The statutes provide that every physician attending a pregnant woman shall obtain, at the time of the first examination, a sample of blood to be sent to a laboratory approved by the State Commissioner of Health, for a standard serological test for syphilis. These tests will be made without charge by the state laboratory.

Oklahoma statutes also require persons intending marriage to obtain a serologic test for syphilis within 30 days prior to application for marriage license.

Persons suffering from or infected with venereal diseases in a communicable stage are prohibited from engaging in occupations involving intimate personal contacts with children or in the occupation of nurse, domestic servant, hairdresser, barber, chiropodist, manicurist, bath attendant or masseur. Barbers and cosmetologists are required by statute to submit a serologic test for syphilis which must show a negative result before a state license will be issued, and many cities and towns within the state have ordinances requiring the pre-employment blood testing of food handlers and other classes of employees.

Public Health Nursing

The duties or function of the Division of Nursing must be considered first on the state level and second on the local level.

On the state level, it is the responsibility of the Division of Nursing to work with other division directors on planning new programs of work, strengthening or expanding old programs of work, and finding qualified nurse personnel to do the job. This responsibility involves participation in budget planning, as well as program planning and personnel management.

On the local level, the principal responsibility of the Division of Nursing is determining and maintaining standards of public health nursing service. Public health nursing constitutes an important part of the total public health program. The *Manual of Public Health Nursing* (Third Edition) carries this statement: "Public Health Nursing includes all nursing services organized by a community or agency to assist in carrying out any or all phases of the public health program. Services may be rendered on an individual, family, or community basis in home, school, clinic, business establishment, or office of the agency."

Perhaps the home visit can be designated as the most important activity of the public health nurse. The extent and effectiveness with which the program is carried out depends on this phase of the nurse's program. The nurse, in the home, teaches personal and community hygiene; she helps the mother to understand the importance of early medical diagnosis and treatment; she helps to secure adjustment of social problems which affect health, if possible; and she influences the community to develop facilities for the promotion of a sound and adequate community health program and shares in action leading to betterment of health conditions.

THE OKLAHOMA COMMISSION FOR CRIPPLED CHILDREN

1141 North Robinson

Oklahoma City, Okla.

Telephone 7-7551
Joe N. Hamilton, Director

The 1949 Oklahoma Legislature rewrote the crippled children's law and, while rather radical changes were made in the mechanics of the act, the basic philosophy of hospital care for all needy children remains unaltered. All Oklahoma acts that have had to do with the treatment of crippled children have been unique, in that little if any distinction has been made in respect to the type of malady. A child with a hernia, or acute appendicitis has been, and is today, just as much a crippled child in the sight of the law as one with club feet, or one suffering from the after-effects of infantile paralysis.

The new act, Senate Bill 144, Session Laws 1949, brings the Oklahoma program in line with Federal requirements. It makes the Oklahoma Commission for Crippled Children the single responsible agency. The Commission is financed to a large extent by a direct state appropriation, rather than indirectly through the Oklahoma Hospital for Crippled Children as provided in the former law.

County financial participation is continued under the provisions of the new act, and the county court retains full and complete control of his respective crippled children's budget account which has been raised to an amount equal to a full fifth mill levy on the assessed valuation.

The cooperation of the State Department of Public Welfare is now specifically authorized. The Department, as in the case of the county courts, retains full control of its respective funds.

Patients may be accepted by the Oklahoma Commission for Crippled Children for treatment upon application by a county court, a county welfare worker, a health official, a licensed physician, or a parent. When

the application is signed by the county judge, the Commission is authorized by law to ask reimbursement from the respective county. If the application is signed by an official of the State Welfare Department, the Commission may seek reimbursement from the State Assistance Fund.

The 1949 Act provides for a Professional Advisory Committee to be appointed by the Commission. This Committee is to act as an advisory body to the Commission in the matters of hospital and medical care standards. Final decisions, however, are the prerogative of the Commission. The act, also, provides for the appointment of a director by the Commission who is the administrative and executive head of the program.

The Commission is composed of the following ex-officio members: Grady F. Mathews, M.D., State Commissioner of Health; Dean Mark Everett, Oklahoma University School of Medicine; Oliver Hodge, Ph.D., State Superintendent of Public Instruction, and Virgil Stokes, Director, State Department of Public Welfare.

A crippled child, under the provisions of the 1949 law, is one who has a remedial or treatable condition, and whose parents are financially unable to provide essential care. While the act itself does not limit treatment to hospital care, administrative and financial limitations make the program essentially one of treatment within a hospital.

Application forms are well distributed about the State. They can be obtained from any county Judge's office, from most hospitals, from the office of the county welfare director, or from a county health department. Also, forms are always available at the offices of the Oklahoma Commission for Crippled Children, 805 Midwest Building, Oklahoma City, or 1523 South Peoria, Tulsa.

SUPPORT YOUR

OKLAHOMA MEDICAL RESEARCH

FOUNDATION

STATE OF OKLAHOMA DEPARTMENT OF MENTAL HEALTH

306 Capitol

Oklahoma City, Okla.

Telephone 58-2195

Charles F. Obermann, M.D., Medical Director

The Department of Mental Health was created during the Twenty-First Legislature by the passage of Senate Bill No. 122. This Act is known as the Mental Health Law. The law was re-written during the Twenty-Second Legislature by passage of House Bill 437, making changes in some portions of the bill, especially in regard to some of the admission procedures. By the passage of the act of the Twenty-First Legislature a new department in the State of Oklahoma was created and the governing board for the mental hospitals, epileptics and school for mental defectives was transferred from the State Board of Public Affairs to the Mental Health Board.

The Mental Health Board is composed of a Chairman, who is also Chairman of the Board of Affairs, the State Commissioner of Public Health, the Dean of the Medical School of the University of Oklahoma, or someone he may designate, a psychiatrist certified as a Diplomate of the American Board of Psychiatry and Neurology, and a Doctor of Medicine duly licensed to practice in the State of Oklahoma. The last two mentioned members are appointed by the Governor. The duties of the board pertain to the care and treatment and hospitalization of the mentally ill, mental defectives, and epileptic persons. The Mental Health Board is the administrative board of the Department of Mental Health and as such has sole and exclusive control of the several institutions of the department, and institutions that hereafter may be established when such institutions deal with the care and treatment of mentally ill, mentally defective, or epileptic persons. The State Board of Affairs continues as purchasing agent for the institutions in the Department of Mental Health.

The power to appoint a Medical Director for the Department of Mental Health is vested in the Mental Health Board. The Mental Health Law states that the Medical Director shall be a well-educated physician, graduated from a recognized Class A medical school (as classified by the American Medical Association and the Association of American Medical Colleges), licensed to practice in the state of Oklahoma, certified as a Diplomate of the American Board of Psychiatry and Neurology and shall have at least ten years experience in the actual practice of psychiatry, at least five years of which shall have been in an institution for the care and treatment of persons suffering from mental illness, mental defectiveness, or epilepsy. The Mental Health Board appointed Charles F. Obermann, B.A., M.D., M.S., Medical Director of the Department of Mental Health in December of 1947 and he continues to serve in that capacity. He is a Diplomate of the American Board of Psychiatry and Neurology, Fellow of the American Psychiatric Association, and Fellow of the Southern Psychiatric Association. The Medical Director shall, in general, serve in the capacity of an advisor, an inspector, and as a coordinator. Specific duties are outlined in the Mental Health Law, among which he is to aid and assist, and cooperate with the State Department of Health, the University of Oklahoma, and other institutions of higher learning, public schools and others interested in public education in the problems of mental hygiene, and in the establishment of all-purpose mental hygiene clinics.

The following hospitals and school are within the Department of Mental Health: Western State Hospital, Fort Supply, Oklahoma, Henry L. Johnson, M.D., Superintendent. Central State Hospital, Norman, Oklahoma, David W. Griffin, M.D., Superintendent. Central State Hospital Annex, Lexington, Oklahoma, David W. Griffin, M.D., Superintendent. Eastern State Hospital, Vinita, Oklahoma, Felix M. Adams, M.D., Superinten-

dent. Taft State Hospital, Taft, Oklahoma, (for Negro mentally ill, mentally defective, epileptics) Edna P. Henry, M.D., Superintendent. Pauls Valley State Hospital, Pauls Valley, Oklahoma, Carl T. Steen, M.D., Superintendent. Enid State School, Enid, Oklahoma, Anna T. Scruggs, F.A.A.M.D., Superintendent.

Procedure for Admission of Mentally Ill

Any person alleged to be mentally ill to a degree which warrants institutional care, and who is not in confinement on a criminal charge, and who has no criminal charges pending against him, may be admitted to and confined in a State hospital or a State psychopathic hospital or a licensed private institution by compliance with any one of the following admission procedures:

- a. On voluntary application.
- b. On certification by two (2) examiners, each of whom must qualify under Section 18a of the Act.
- c. On court certification.

Qualified Examiners

Any physician, duly licensed to practice medicine by the Oklahoma Board of Medical Examiners shall be a qualified examiner under the terms of Section 18a of the Mental Health Law.

Procedure for discharge, convalescent leaves, visiting and return therefrom covered in the Mental Health Law.

Procedure for Admission and Release of Epileptic Persons

All procedures dealing with the admission to, or discharge or release from, or return to a State hospital from convalescent leave, visiting, or escape, shall be identical for epileptic persons and for mentally ill persons, and all official papers dealing with such procedures shall be worded for epileptic persons the same as for mentally ill persons, except the word 'epileptic' shall be used in place of the words 'mentally ill'.

Procedure for Mental Defectives

White mentally defective persons as described in this Section shall be admitted to the Enid State School, while colored (Negro) mentally defective persons of mental age described in this Section shall be admitted to the similar school on the grounds of the Taft State Hospital.

Admission of mental defectives is made by making written application on forms obtainable from the superintendents of the respective schools for mental defectives, and also from the Medical Director of the Department of Mental Health.

The program of the Department of Mental Health can be summarized under four major fields of activity.

1. Patients safety, sanitation and comfort.
2. Patients intensive treatment, care and rehabilitation.
3. Prevention of mental disease. Each institution should develop into a mental health center with out-patient service.
4. Program for teaching, training and research. The teaching program should include teaching the public, as well as the medical, nursing, and allied professions, especially dietitians, occupational and recreational therapists, clinical, psychologists, and psychiatric social workers.

The greatest obstacle to carrying out this program to the full extent is the greatly overcrowded conditions in the institutions in the Department of Mental Health and the need for additional qualified and trained personnel, especially physicians, nurses and attendants and such auxiliary workers as psychiatric social workers, clinical psychologists, occupational therapists, dietitians,

and other professional, technical and therapeutic personnel.

Approximately 10,000 individuals are receiving attention in the institutions in the Department of Mental Health. During the calendar year 1948, 1,424 individuals were admitted for the first time to institutions in the department and a total of 1,112 were returned to the institutions after a former admission. During the same period 1,200 patients were released under convalescent leaves, 355 discharged directly from the hospitals, 624 patients died while in institutions, 120 left without permission, and 76 transferred making a total of 2,365 separating from the institutions. Also in 1948, 600 former patients were given a final discharge after a period of convalescent leave.

Increased appropriations available July 1, 1949, have made possible employment of additional personnel, and other improvements which have resulted in better care of patients in the institutions of the Board.

The Central State Hospital at Norman affiliated with

the Oklahoma University School of Medicine assists in a teaching program for medical students and this hospital has a training school for student nurses affiliating in psychiatric nursing which opened September 1, 1949, with five nursing schools in the state affiliating.

A program for attendants on-the-job training has been instituted in a number of hospitals in the department and this training program is being expanded as rapidly as possible. Plans to assist in training certain auxiliary personnel such as social workers and clinical psychologists are being accomplished.

It is the desire of the Department of Mental Health, through the Medical Director, Mental Health Board, and superintendents and staffs of the various hospitals in the department, to work with physicians in the state whose former patients require admission to an institution in the Department of mental Health, so that those individuals can be given maximum care, cure, improvement and rehabilitation.

STATE VETERANS DEPARTMENT OF OKLAHOMA

State Historical Building

P. O. Box 3067, Oklahoma City, Okla.
Telephone 5-3546
Paul Cope, Director

State Veterans Hospital
Sulphur, Oklahoma
Will G. Crandall, M.D., Superintendent

Oklahoma Veterans Home
Ardmore, Oklahoma
Howard J. Lindell, Superintendent

Claims and Services

All fields of activities of the State Veterans Department are those duties performed by the Claims and Service Representatives who assist veterans in all problems with which they are confronted in the field of veterans affairs. The bulk of their work consists of assisting the veterans in filing applications for disability compensation, pension and death pension, as well as out-patient treatment and hospitalization. There is a staff maintained in the Veterans Administration Regional Offices at Muskogee and Oklahoma City whose primary responsibility it is to represent veterans and their dependents before the Rating Boards on matters concerning disability compensation, pensions and death benefits. They assist the veteran in that they help to evaluate evidence presented by the veteran on his claim as well as prepare his case for presentation. The field representatives of the State Veterans Department travel throughout the State on an itinerant basis, serving each county seat town and larger communities of the State once each week and the smaller communities once every ten days to two weeks. They work through the service officers of the local posts of the American Legion and Veterans of Foreign Wars. These representatives are well qualified to assist veterans and their dependents in preparing claims for the Veterans Administration and securing hospitalization and out-patient treatment as well as assisting in any other phase of veterans' affairs. They are at the service of the people in their communities and will render any assistance to any person who is attempting to help a veteran. They may be reached generally through the service officers of the local veterans organization post. With their reputation and contacts, it is often possible for them to secure assistance for the veteran when other means have failed.

State Veterans Hospital

The State Veterans Hospital is located at Sulphur, Oklahoma and is the direct responsibility of the War Veterans Commission. It is predominantly a tubercular hospital having 120 beds for tubercular patients and 55 beds for general medical and surgical cases. The surgery is limited to the less complicated cases. Veterans who have been honorably discharged and have been legal residents of the State of Oklahoma for at least one year are eligible for admission. Generally speaking,

it is best for the veteran's doctor to contact the hospital for admission; however, in emergency cases, anyone may call the Superintendent for admission. The Hospital is well staffed and is probably the best maintained State institution in Oklahoma.

Oklahoma Veterans Home

The Oklahoma Veterans Home at Ardmore, Oklahoma was established by the 1949 Legislature. There were funds appropriated for the remodeling, repairing and equipping of the Institution for an approximate capacity of 120 veterans. Additional monies were allotted out of the recent bond issue and will be used to enlarge the institution to a total capacity of approximately 250. Although definite regulations have not been established as yet, it is expected that veterans who have a chronic or convalescent disability of sufficient severity to prevent them from earning a living will be admitted if they have been honorably discharged and have been a legal resident of the State of Oklahoma for at least ten years, two of which must have been immediately preceding application to the home. It has been tentatively planned that all applicants will be examined physically at the State Veterans Hospital in Sulphur before admission to the Home. The Home is at the present time in the process of being remodeled and repaired and will be open for occupancy in the last half of 1950. Inquiries should be directed to the Director of the State Veterans Department, Box 3067, Oklahoma City.

University Hospital Veterans Ward

A 32-bed ward is available to veterans who are legal residents of the State of Oklahoma, honorably discharged from wartime service and are financially unable to pay necessary expenses of hospitalization or medical treatment. Out-patient treatment is also available to veterans who meet the above requirements. Colored veterans are admitted under the above conditions when there is a vacancy in the general colored ward. Patients cannot be admitted with any form of communicable or venereal disease, tuberculosis, alcoholism or any condition which will not be benefited by treatment. Veterans are admitted upon the recommendation of the State Veterans Department, American Legion or Veterans of Foreign Wars Hospitalization Officers. In the event of an emergency case, anyone may call the hospitalization officer or the physician on duty at the Hospital.

VETERANS ADMINISTRATION

Oklahoma City Regional Office
1101 North Broadway, Oklahoma City, Okla.
Telephone 2-9541

Charles W. Robinson, M.D., Chief Medical Officer
V. A. Hospital — Will Rogers Field
Oklahoma City
Telephone 6-3377

Clarence E. Bates, M.D., Manager

Muskogee Regional Office
2nd & Court Streets, Muskogee, Okla.
Telephone 7020

George E. Riggs, M.D., Chief Medical Officer
V. A. Hospital — Memorial Station
Honor Heights Drive — Muskogee
Telephone 5430

Daniel H. Miller, M.D., Manager

Out-Patient Care Information

It is felt that an extract of necessary information concerning the obtaining of authorities for out-patient treatment and hospitalization for veterans would be of value to participating members of the Oklahoma State Medical Association. Therefore, the pertinent rules, regulations and requirements are given in the following paragraphs, leaving out the nonessential portions, so that any physician desiring information on how to handle the veterans' medical problems will have a complete concise set of instructions which will assist him in properly requesting treatment, completing his bills, and obtaining payment of same.

RULES AND REGULATIONS OF VETERANS ADMINISTRATION

SECTION I

Out-Patient Treatment

1. General considerations:

Normally an eligible veteran who lives in the immediate vicinity of a Veterans Administration Clinic or Hospital will be referred to such for out-patient treatment. When a veteran lives at a distance from such a clinic or hospital, when facilities are not available there to properly care for him, when travel would be inadvisable because of the physical condition of the veteran, or whenever, in general, it is considered to be in the best interests of the veteran and the Government, treatment by a fee-basis doctor will be authorized. **IT IS NOT THE RESPONSIBILITY OF THE VETERANS ADMINISTRATION TO PROVIDE MEDICAL CARE FOR A VETERAN'S FAMILY. UNDER NO CIRCUMSTANCES WILL THEY PAY FOR SUCH TREATMENT RENDERED BY A PRIVATE PHYSICIAN.**

2. Eligibility for treatment by a private doctor:

a. It must be borne in mind that with very few exceptions the Veterans Administration is only allowed to pay a private doctor for treating a male or female veteran for a condition which a Veterans Administration rating board has ruled to be **SERVICE-CONNECTED** or which on medical grounds can be considered to be aggravating such a basic service-connected condition. **FOR THIS REASON IT IS WISE TO SECURE AUTHORIZATION BEFORE STARTING TREATMENT.**

b. **OUT-PATIENT TREATMENT MAY NOT BE GIVEN FOR A NONSERVICE-CONNECTED DISABILITY TO EITHER MALE OR FEMALE VETERAN. YOU MUST REALIZE THAT THE VETERANS ADMINISTRATION HAS NO CHOICE IN THIS MATTER. IT IS THE LAW.**

c. Most veterans whose cases have been adjudicated, **CARRY PAPERS** listing the disabilities that have been ruled service-connected in his case. In case of doubt, you can contact the Chief, Out Patient Section at Oklahoma City, or Dr. George E. Riggs at Muskogee.

3. Authority to initiate out-patient treatment:

a. Authority for a private physician to render out-patient treatment to an eligible veteran is issued by the Chief, Out-Patient Section, of a regional office. This authority is issued in response to a request from the veteran or from his doctor, or it may be initiated by the Chief, Out-Patient Section. If the veteran requests treatment, he should use a special form. The doctor should use VA Form 2690, but his request may be made by telephone, telegraph, or by letter. Whenever possible, at least verbal authorization should be obtained before initiating treatment. If this proves impracticable, you must **MAKE YOUR REQUEST IN ONE WAY OR ANOTHER WITHIN TEN DAYS.**

b. Under all normal circumstances treatment can be authorized only to include the calendar month. Along with the authorization you will receive copies of VA Form 2690 and VA Form 2690a. Form 2690 should be used to request authority to continue treatment. Fill out only that part of the form that is necessary to show facts.

4. Reports of treatment and authority to continue treatment:

a. Form 2690a, as its title indicates, is a monthly or final report of treatment rendered. **FORM 2690a MUST ALWAYS BE SUBMITTED AT THE CONCLUSION OF A CASE.**

b. If you feel that the patient will require treatment during the succeeding month, Form 2690, and Form 2690a, will be used to request such authority and to submit a monthly report of treatment. Use the back of the form if more space is needed. **IT SHOULD BE SUBMITTED BY THE 23RD OF THE MONTH SO THE CHIEF, OUT-PATIENT SECTION WILL HAVE TIME TO GET THE NEW AUTHORITY TO YOU BEFORE THE FIRST OF THE NEW MONTH.** Disregard the instructions on VA Form 2690a. Furthermore, it is no longer necessary to secure the veteran's signature on any part of the form.

(1) The doctor's fee cannot exceed the fee shown on the face of the authority. If the authority does not cover the amount of treatment rendered — return and request a new authority. Item numbers on the doctor's bill must be the same as on the authority.

(2) The original of the authority as well as the original of the doctor's bill must be returned to the Veterans Administration office.

(3) A narrative report in duplicate is required on any type of examination before payment can be made.

(4) Give the veteran's name, C-number and address on all correspondence.

(5) Give your diagnosis on all requests.

SECTION II Hospitalization

1. General considerations:

Requests for hospitalization or domiciliary care should be executed by a veteran or his representative on VA Form 10-P-10. Veterans usually secure these forms from Veterans Administration Contact Officers or from service organizations such as the Red Cross, American Legion, etc. The examining doctor should fill out the medical certificate and mail the completed form to the nearest Veterans Administration Regional Office. (Veterans Administration contact officers are allowed to authorize such examinations. When one of these officers has authorized this service, send your bill to the nearest Veterans Administration regional office.) All the Veterans Administration regulations predicate that a Veterans Administration hospital will be the first choice for hospitalization and treatment of a veteran.

2. Emergency hospitalization:

a. A veteran may be hospitalized and treated in a private hospital for a service-connected disability if there is no bed available for him in a Veterans Administration hospital, or if the distance from a Veterans Administration hospital or the condition of the patient render it hazardous to life or health to transport him to such a hospital. Authority for such hospitalization and treatment should be secured in advance from the Chief, Hospitalization, of the nearest regional office. Collect telephone calls or telegrams may be used. **IF THIS PROVES IMPRACTICABLE, AUTHORITY MUST BE REQUESTED WITHIN 48 HOURS.** Form 10-P-10 should be executed and forwarded later so that the record may be complete.

IN ADDITION TO EMERGENCY SERVICE-CONNECTED CONDITIONS, A PUBLIC LAW 16 TRAINEE IS ELIGIBLE FOR HOSPITALIZATION FOR EMERGENCY SURGERY FOR ANY CONDITION INTERFERING WITH HIS TRAINING. Authority for such hospitalization and treatment should be secured in advance from the Chief of Hospitalization, who is Dr. Thomas J. Barb in the Oklahoma City office, and Dr. George E. Riggs in the Muskogee office.

b. THE VETERANS ADMINISTRATION CANNOT PAY FOR THE PRIVATE HOSPITALIZATION AND TREATMENT OF MALE VETERANS SUFFERING FROM DISABILITIES WHICH ARE NOT SERVICE-CONNECTED.

(1) Private hospitalization and treatment may be authorized for a female veteran for the treatment of a nonservice-connected disability (except normal pregnancy). You should make every effort to secure prior authorization in such cases. If this is impossible, make your request within forty-eight hours, as above.

SECTION III Prescriptions

1. When it is necessary for you to prescribe medication or medical requisites for a veteran whom you are authorized to treat as an out patient, there are two methods you may follow. Prescriptions may be written on your own or Veterans Administration prescription blanks.

a. Prescriptions for medication and **medical requisites may be filled by any private pharmacy which is a member of the State Pharmaceutical Association. All of these Associations have contracts with the Veterans Administration. You must execute and sign the following certificate on the front or back of the prescription: "I am authorized to treat and prescribe for the above-named Veterans Administration patient."

2. A member of the State Pharmaceutical Association

is known as "participating pharmacist." He will care for all the rest of the details. Except in emergencies only, the participating pharmacist can fill the prescription and secure reimbursement from the Veterans Administration. In case there are no participating pharmacies in your community, please notify the Chief, Out-Patient Section, who will contact the Secretary of the State Pharmaceutical Association and attempt to get the pharmacist enlisted for participation in your town.

Before a prescription can be issued in any month, an authority must have been issued you for at least one office visit for that month. When such is done, then all prescriptions issued in treatment of the service-connected disability in that month will be valid.

**At the present time only the following "medical requisites" may be supplied by private pharmacists: Insulin syringes and needles, atomizers, nebulizers, hot water bottles, fountain syringes, ice bags, urinals, bedpans or enema cans, feeding tubes, and ear and ulcer syringes.

SECTION IV Bills

1. A form for your bill is printed on the back of your authorization to perform the services. You will receive four copies of this authorization, a signed original and three carbon copies.

2. All bills should be itemized in triplicate using the original and two copies. Your name at the top of the bill should be exactly the same as it appears on the face of the authorization. Sign the certificate below the bill in the same way, on the original only.

3. Send the original of the bill bearing the signature of the authorizing officer and your signature, and two copies of the bill to the office which authorized your services. The fourth copy of the authorization may be retained for your records.

VOCATIONAL REHABILITATION DIVISION STATE BOARD OF VOCATIONAL EDUCATION

1141 North Robinson

Telephone 7-7551

Oklahoma City, Okla.

Voyle C. Scurlock, Director

The Vocational Rehabilitation Division of the State Board of Education has functioned in Oklahoma since 1925. Its activity can be defined as an extension of the public school system to a selected group of disabled persons. Its purpose is to give such services as are necessary to enable the impaired individuals to enter, or re-enter, employment in industry where they can make the best use of their skills and abilities.

Eligibility

The minimum age limit is sixteen years; there is no maximum age limit, but the applicant must not be too old to be reasonably expected to resume employment of some type. Each applicant must have a permanent defect, but must be physically able and mentally capable of carrying on successfully in employment on a competitive basis. He must have such potentialities that he can be expected to develop a marketable skill as a result of the services provided for him.

Functions

The services of Vocational Rehabilitation are in the following areas:

1. Vocational Guidance

The client is given information and advice as to vocational opportunities as well as the physical, mental, educational, temperamental and social requirements of various occupational fields.

Individual counseling and advice is given in the selection of a suitable job objective. The counseling is based on a study of the individual's physical, mental, social and economic assets and liabilities as well as on available training and employment opportunities.

2. Physical Restoration

Medical, surgical, psychiatric, and dental care may be given to remove or reduce a disability that creates an occupational handicap. These services are provided only when the client is financially unable to provide them for himself.

Prostheses may be furnished, on a basis of need, if the client's ability to function on the job can be improved thereby.

3. Vocational Training

Arrangements may be made for any type of training that is vocational in nature and will lead toward a definite line of work. It may be given in a state institution, a private trade or commercial school, through a private tutor, or in a commercial or industrial establishment. The cost of tuition, books, tools and instructional supplies may be provided. Maintenance on a basis of need may be given during the training period. Counseling and supervision are provided during the training period to assure that the training is sufficiently thorough and of such nature as to be effective.

4. Selective Placement

Selective placement is that service which assists the client in finding the occupation best suited to his physical and mental capabilities. Jobs are analyzed to determine which ones may be held by individuals with various handicaps. The individual client is studied to determine the position for which he is best suited.

Counsel and advice are given in regard to making applications for jobs, contacting employers, adjusting to work routines, cooperating with co-workers, and

whatever seems indicated to help the client adapt himself to industry. Follow-up is maintained for a reasonable length of time after employment is secured to be certain that the client has made the necessary adjustments and for the purpose of determining that his rehabilitation is complete.

Physical Restoration Program

Prior to 1943, the Vocational Rehabilitation Service had no funds for medical care. The vocational training program was planned around the client's disability, since there was no other provision for the care of the indigent person with a disability, particularly those needing remedial or elective treatment.

Recent Federal legislation (1943) has made funds available to states and territories on a dollar per dollar matching basis to provide treatment for the permanently disabled person who cannot provide such treatment for himself. It is not a general medical program and does not include the care of the acutely ill. Indigent clients whose occupational handicap can be removed or reduced by treatment are eligible for this service.

1. Program Direction

A medical consultant, functioning on a part time basis, heads up this service. He advises in regard to the execution of policies for physical restoration, assisting the agency in its contacts with the medical and associated professions and in the maintenance of standards established for the selection of physicians, hospitals, and other professional personnel and facilities necessary to the proper functioning of the program.

The medical care program is directly supervised by a medical social worker with a master's degree in her profession. She has had a number of years experience in hospital and public medical care programs. She works under the direction of the medical consultant.

2. Medical Advisory Committee

Realizing the impossibility of working out such a plan without the advice and close cooperation of the medical profession, the State Board of Education asked the Oklahoma State Medical Association, the Oklahoma State Dental Society, and the Oklahoma State Hospital Association to suggest members for an advisory committee to work with the director, the medical consultant, and the supervisor of physical restoration.

Its duties are those of advising on the policies and procedures of a statewide medical care plan. The problem of setting up standards for physicians and surgeons participating in the program, fees to be paid

for their services, standards for hospitalization and fees to be paid hospitals, standards for related personnel and items needed to carry out a medical treatment plan and fees to be paid for such services have been established by the advisory committee. The committee does not deal with individual cases but the over-all policies guiding the program.

3. Types of Cases Accepted

Any condition, regardless of its physical or mental origin, that is an impediment to the individual's occupational performance, is relatively stable, and is amenable to treatment so that it can be remedied to a substantial degree in a reasonable length of time is acceptable. The provisions eliminate the acutely ill and the long-time chronic cases who do not respond to treatment and who are, therefore, not in need of vocational assistance. Surgery of cosmetic value may be done if the condition mitigates against the client's securing the type of work for which he is fitted or if it creates an emotional handicap.

Dental care is provided for an individual whose vocational handicap is caused by, or seriously aggravated by, a dental problem. This service does not take care of minor dental needs but of major conditions which constitute or create a vocational disability. It is provided only to those who are unable to pay for the service themselves. Fees paid to dentists are those approved by the Oklahoma State Dental Society.

Psychiatric care is provided for those who can be rehabilitated by it. In the past, only physical disabilities were considered in this program. Now, however, individuals who are vocationally handicapped because of a mental illness are accepted for service. This is necessarily a highly selected group because of the lack of adequate facilities for psychiatric care in the state as well as the lack of experience in handling such individuals on the part of the agency's staff. Following complete physical and psychiatric examinations, an individual may be accepted for vocational rehabilitation services if, in the opinion of the psychiatrist, a properly selected job or suitable training would rehabilitate the individual.

The individual with the obvious disability — the loss of a limb, blindness, deafness, or paralysis — was formerly the only client referred to this Service. Other permanently disabled persons, however, may be in need of rehabilitation. The types accepted by the agency include the epileptic, the diabetic, the arrested tuberculosis case, and the cardiac cripple.

STATE OF OKLAHOMA DEPARTMENT OF PUBLIC WELFARE

Capitol Office Building

Oklahoma City, Okla.

Telephone 5-3526

Virgil L. Stokes, Director of Public Welfare

The Oklahoma Social Security Amendment, adopted July 1936, provides for the relief and care of needy aged persons, and of other needy persons who because of immature age, physical infirmity, disability, or other cause are unable to provide for themselves. The Department is under the control of the Oklahoma Public Welfare Commission, a nine member body appointed by the governor. This group is responsible for the selection of the Director.

The Department is financed from the State Assistance Fund, derived from the two per cent sales tax, supplemented by Federal funds from the Social Security Ad-

ministration on a basis which provides more than fifty per cent of all funds expended.

The Department discharges its responsibility for providing relief and services through two State-wide programs: the Public Assistance program and the program of Child Welfare Services. In addition, a small part of the State Assistance Fund is made available by law for crippled children's services. This is pooled with other funds for the same purpose and is administered by the Crippled Children's Commission, as provided by the new law which became effective July 1, 1949.

Public Assistance Program

The Public Assistance program consists of Old Age Assistance, Aid to the Blind, and Aid to Dependent Children. In all categories, a basic procedure is followed for determining needs on a monthly budget basis. The client's own resources are then supplemented as necessary to meet his budget need, insofar as agency funds permit. Through the old age category, needy persons who are sixty-five years of age or older, and who are Oklahoma residents, are assisted. Seventy-five per cent of the State Assistance Fund is earmarked by the law for this category and it has, therefore, been possible to help aged clients according to their full monthly budget need, subject only to a maximum payment of \$58.00 a month. The Department is currently assisting 100,737 aged persons with an average monthly payment of \$52.14.

Through the Aid to the Blind program, needy residents with a visual acuity of 20/200 or less are similarly assisted. Two per cent of the State Assistance Fund is earmarked for this program and it has been possible from this amount to provide for the full monthly budget need of blind recipients except in cases where this need exceeds the maximum payment of \$58.00 a month. The Department is currently assisting 2,074 recipients with an average monthly payment of \$53.21.

Through the Aid to Dependent Children program, assistance is given to children who are living in their own homes but who are deprived of care or support because a parent is dead, ill or absent from the home. Seventeen per cent of the State Assistance Fund is earmarked for this category. This has never proved to be a sufficient amount to meet the monthly budget need of children known to be eligible. Consequently, it has been necessary to limit payments to this group. This has been done by assisting families in the category only up to sixty per cent of their monthly budget need, subject to a maximum which varies with the number of children. Currently, the Department is assisting 60,954 children in 24,068 families with an average payment per family of \$52.08 a month. On the average, there are 3.4 persons per family.

The basic monthly budget used for establishing the needs of any given family includes food, clothing, shelter, utilities and household equipment, and allowances for incidental and personal care items. From these last named allowances, some needs of a medical nature can be met, particularly, needs for first aid home supplies. In addition, certain allowances may be included in the budget for special diets, and prosthetic appliances if prescribed by a licensed physician. Other than these, no allowances may be included in the monthly budget for medical care. The law does not prohibit the inclusion of allowances for medical treatment, but since the funds available to the Department have proved insufficient even for the so-called basic necessities for all cases, the Commission has thought it inadvisable to reduce the allowances for the basic items in order to reserve some funds for the provision of medical care.

It is to be expected that health needs are an important factor in programs dealing with aged and blind persons, and with children of disabled parents. This has been borne out by the experience of the Department which indicates that there are health needs in a large per cent of the Old Age group. There are health problems related to the eyes in all Aid to Blind cases unless the condition resulting in blindness is hopeless and not susceptible to treatment. In the Aid to Dependent Children category, about one-third of the group are receiving assistance because of a parent's

disability. The medical needs of many persons in all categories are met through other State facilities and programs such as the Crippled Children's Commission, University Hospital, State owned hospitals, Vocational Rehabilitation and the Public Health Department. The veterans and Indian Hospitals serve many assistance recipients. The indigent funds of the County Commissioners pay for medical service for an appreciable number of assistance recipients in certain counties. There remains, however, a group with unmet medical needs. A study by the Department at the request of the Medical Advisory Committee in 1948 indicated that about half of the individuals in the Aid to Dependent Children caseload who are known to be in need of medical care are actually receiving it.

The State Medical Association has made a committee of physicians available to the Department. These physicians have assisted in developing definitions of disability, in formulating agency policy related to health conditions and in reviewing the medical reports of the individual cases to determine whether there is adequate medical data available to establish the disability of parents whose children are deprived of support on grounds of illness. The services of the Medical Advisory Committee have proved to be of great value to the Department.

The determination of eligibility for receiving public assistance is made in the Department's county offices. At least once a year, each recipient family is re-investigated to establish continuing eligibility. A county welfare department office is located in each county and operates under the direction of a county director. Caseworkers are assigned to each county office, the number being determined by the number of cases in that county. The caseworker is responsible for making such contacts as are necessary for establishing eligibility, and along with this, for giving consultation and referral service to clients, insofar as they need and want such service. The caseworker also has a responsibility for helping families to become economically self-sufficient wherever possible. It is the basic philosophy of the Department that assistance is a right established by law for those who are eligible but it should be so administered as to contribute to the rehabilitation of recipients to the greatest possible extent.

Child Welfare Services

The Child Welfare Division of the Department of Public Welfare was set up for the protection and care of homeless, dependent and neglected children, and children in danger of becoming delinquent. The major services include services to the unmarried mother and her child; services to homeless children for whom the Courts have asked us to plan; services to children with special behavior problems; and services to children with special medical problems.

For children who need substitute homes, the Child Welfare Division arranges for the placement of the child in a foster home or in an institution, depending on the needs of the individual child. Types of foster homes include boarding homes, wage homes, free homes and adoptive homes. Before a child is placed in an adoptive home, a careful study is made of both the child and the adoptive parents, in order that each child will be assured the home that is the most suitable for him.

The crippled children's assistance program is under the general supervision of the Division of Child Welfare. The services to crippled children is coordinated and integrated with services to crippled children under the Oklahoma Commission for Crippled Children.

STATE BOARD OF PUBLIC AFFAIRS

Capitol Office Building

Telephone 58-2155

Oklahoma City, Okla.

W. R. Borgman, Chairman

The State Board of Public Affairs, consisting of three members: W. R. Borgman, Chairman; John T. Sanford, Vice Chairman; Joseph McClellan, Secretary-Member, is the controlling Board over the institutions designated below:

1. Western Oklahoma State Hospital, Clinton

Mr. C. A. Wheeler, Business Administrator.

Admission of Patients: An application, which may be secured from the institution, must be completed by a reputable physician and one County Commissioner, stating applicant's physical condition and financial status and returned to the institution. Upon acceptance of the application, the patient will be notified when to report. If applicant is to be a private patient, a letter or certificate from the applicant's physician recommending hospitalization will be required. Upon acceptance of application, the patient will be notified when to report to institution.

2. Training Schools

Girls' Town, Tecumseh, Mrs. M. E. Fuller, Superintendent

Training School for White Boys, Stringtown, W. T. Smith, Superintendent

Training School for Negro Boys, Boley, Major H. C. McCormick, Superintendent

Training School for Negro Girls, Taft, Mrs. P. M. Clayton, Superintendent

Admission of Inmates: Upon commitment by the County Judge.

3. Orphans' Homes:

Whitaker State Orphans' Home, Pryor, Beale G. McCarty, Superintendent

D. B. & O. Institute, Taft, J. W. Giles, Superintendent

Admission of Inmates: Upon recommendation by the County Judge

The State Board of Public Affairs is the fiscal agent for the following T. B. Hospitals, however, the State Commissioner of Health appoints the superintendents and is the administrative agent for same.

Eastern Oklahoma Tuberculosis Sanatorium, Talihina, Dr. F. P. Baker, Superintendent

Western Oklahoma Tuberculosis Sanatorium, Clinton, Dr. D. L. Coffman, Superintendent

Admission of Patients: An application, which may be secured from either institution, must be completed by a reputable physician, returned to the institution. Upon acceptance of the application, the patient will be notified when to report. There is a ward for negro patients at the Clinton Sanatorium. Applicant must be a citizen of the State of Oklahoma.

The State Board of Public Affairs is the purchasing agent for the several mental institutions of the State of Oklahoma designated below, but, in other than fiscal matters, the Mental Health Board is the administrative board and as such has sole and exclusive control.

Western State Hospital, Supply, H. L. Johnson, M.D., Superintendent

Central State Hospital, Norman, D. W. Griffin, M.D., Superintendent

Central State Hospital Annex, Lexington, D. W. Griffin, M.D., Superintendent

Eastern State Hospital, Vinita, F. M. Adams, M.D., Superintendent

Pauls Valley State Hospital, Pauls Valley, Carl T. Steen, M.D., Superintendent

Taft State Hospital, Taft, E. P. Henry, M.D., Medical Superintendent

Enid State School, Enid, Mrs. Anna T. Scruggs, Superintendent

OKLAHOMA SCHOOL FOR THE BLIND

Muskogee, Oklahoma

V. R. Carter, Superintendent

The Oklahoma School for the Blind had its beginning in a tribal subscription school organized by Miss Lura A. Rowland at Fort Gibson, Indian Territory, in 1897. It became a state institution in 1908, at which time the First Legislature made a biennial appropriation. The School is under the State Board of Education and is Oklahoma's public school for the visually handicapped. Any young person between the ages of six and twenty-one who is normal except for visual impairment is eligible to attend. Pupils who are totally blind or who have very low vision are taught through braille methods. Others whose visual range is between 20/200 and 20/70 and who can pass the oculist's examination are taught in "sight-saving" classrooms

where books in large print are used.

Since these young people must attend a residential school in lieu of one close to home, the State generously assumes room, board, laundry and physician's care. Parents furnish clothing, incidental expenses, transportation to and from the School, and of course three months' summer vacation at home, that they can keep in touch with their normal surroundings and friends and avoid any tendency to become "institutionalized." The departments of the School are Academic, Music, Home Economics, Industrial, and Health and Physical Education. Request application blanks from Mr. V. R. Carter, Superintendent, Muskogee, Oklahoma, or State Board of Education.

OKLAHOMA SCHOOL FOR THE DEAF

Sulphur, Oklahoma

LeRoy B. Hall, Superintendent

The Oklahoma School for the Deaf is a part of the free, public education system of Oklahoma, supported by legislative appropriation. The school maintains a regular nine-months term from September to June. All deaf children between the ages of four years-eight months and twenty-one are entitled to attend the school without charge. A child must be too deaf or hard of hearing to be educated in the public schools to be eligible to attend this school; he must be of sound mind and good moral character; his parents must be residents of the state.

Request for admission to the School for the Deaf is made by direct application to the school by parent, guardian, or any other interested party. Insofar as possible, application should be filed during the spring or summer months, since, under ordinary circumstances, children are admitted only at the beginning of the term in September.

The health needs of the pupils are taken care of

by the school physician-surgeon and two nurses, all of whom are on the school staff. Parents take care of all dental work and glasses.

The academic program of the school consists of oral, aural or manual instruction. Special attention is given to the development of normal language. Both group hearing aids and individual instruments are used throughout the school. In the vocational set-up of the school, pupils may receive instruction in printing and linotyping, cleaning and pressing, carpentry and woodwork, shoe repairing and leather craft, cooking and sewing.

The pupils of this school enjoy a varied social life; an attempt is made to give them the same normal life they would enjoy at home. Camping trips and hikes, parties, clubs, Boy Scouts, movies, banquets, and athletic contests are a part of their social activities. Sunday School classes are taught in the school, and instruction is undenominational.

ALPHABETICAL ROSTER

LICENSED DOCTORS OF MEDICINE RESIDING IN OKLAHOMA AS OF DECEMBER 31, 1949

Names in Capital Letters indicate Members of the
Oklahoma State Medical Association.

(A) Associate Members

(C) Colored Physicians

(H) Honorary Members

(J) Junior Members

(L) Life Members

(R) Retired Members

(Classified Listing of Associate, Honorary, Junior
and Life Members may be found on Page 66.)

A

Aaron, W. H. Pawhuska
ABERNATHY, E. A. Altus
ABERNATHY, J. H. Altus
ABSHIER, A. BROOKS 1200 N. Walker, Okla. City
ADAMS, FELIX M. Vinita
ADAMS, FELIX Nowata
ADAMS, GEORGE M. Medical Arts, Tulsa
ADAMS, RICHARD M. National Bank of Tulsa, Tulsa
ADAMS, ROBERT H. 515 N. W. 11, Okla. City
AKIN, ROBERT H. 610 N. W. 9, Okla. City
AKINS, JACK O. Medical Arts, Tulsa
Aldredge, William M. Vet. Hospital, Muskogee
ALEXANDER, CHARLES J. Clinton
ALEXANDER, E. T. Barnsdall
ALEXANDER, L. A. Okmulgee
ALEXANDER, R. L. Okmulgee
ALFORD, JOHN M. Med. Arts, Okla. City
Alder, Walter H. 109 N. E. 3rd, Okla. City
Allen, Clifford Ward, Jr. 1129 S. Owasso, Tulsa
ALLEN, GEORGE T. 1200 N. Walker, Okla. City
ALLEN, VICTOR K. Med. Arts, Tulsa
ALLEY, RALPH M. (A) Moscow, Idaho
ALLGOOD, EDWARD A. Snyder
ALLGOOD, E. J. Altus
ALLGOOD, JOHN MILTON Altus
ALLISON, JOHN S. Tahlequah
ALLISON, THOMAS P. Sand Springs
Altaras, Leon M. Shawnee
Amos, Chios L. 211 E. 10, Tulsa
AMSPACHER, JAMES C. 525 N. W. 11, Okla. City
ANDELMAN, SUMNER Y. 1611 S. Boston Ave.,
Tulsa
Anderson, Frederick A. Claremore
ANDERSON, HASKELL R. Watonga
ANDERSON, HUBERT M. 525 N. W. 11, Okla. City
ANDERSON, PARKEY H. (H) Forsythe, Missouri
ANDERSON, PAUL S. Claremore
ANDERSON, ROBERT L. Med. Arts, Tulsa
ANDERSON, ROY W. Cordell
ANDERSON, W. D. Claremore
ANDRESKOWSKI, W. T. Ryan
ANDREWS, LEILA E. 509 N. W. 15, Okla. City
ANGUS, DONALD A. 614 "C", Lawton
ANGUS, HANEY A. 614 "C", Lawton
ANGUS, HOWARD 614 "C", Lawton
ANADOWN, PAUL V. Sulphur
ANNADOWN, RUTH VIVIAN O. U. Medical School,
Okla. City

ANSPAUGH, ROBERT D. 1200 N. Walker, Okla. City
APFFEL, PHILLIP R. 602 S. Cheyenne, Tulsa
APPELTON, MEREDITH M. 610 N. W. 9, Okla. City
Applewhite, Gardner H. Shawnee
ARCHER, HOMER V. 1200 N. Walker, Okla. City
ARMSTRONG, O. C. Med. Arts, Tulsa
ARMSTRONG, W. O. Ponca City
Arnold, Ada Martin Claremore
ARRENDELL, C. W. Ponca City
ARRENDELL, CAD W., JR. Ponca City
ARRENDELL, EUGENE H. Ponca City
ARRINGTON, J. E. Frederick
ASHER, JAMES O. Ardmore
ATCHLEY, ROGER Q. Med. Arts, Tulsa
ATHEY, J. V. (L) Bartlesville
ATKINS, PAUL NEWMAN Med. Arts, Tulsa
ATKINS, PAUL NEWMAN, JR. Braniff Bldg., Tulsa
ATKINS, W. H. (J) Norman
Austerman, Warrington Konawa
Austin, Frank H. Ft. Sill
AVEY, HARRY T. 416 N. W. 13, Okla. City
AYCOCK, BYRON W. 1711 Cherry, Lawton

B

Bacoats, A. G. (C) 117 A. North Greenwood, Tulsa
BACON, O. G. Frederick
Bailey, Byron L. 1923 S. Utica, Tulsa
BAILEY, CARL H. Stroud
BAILEY, FRANK M. (R) 1219 N. W. 21, Okla. City
BAIRD, WILSON D. (L) Colcord Bldg., Okla. City
BAKER, ALFRED T. Durant
BAKER, FORREST T. Talihina
BAKER, GEORGE W. Walters
Baker, J. Howard, Sr. Eufaula
BAKER, J. HOWARD, JR. Eufaula
BAKER, L. V. Elk City
BAKER, MARGUERITE M. 1200 N. E. 63, Okla. City
BAKER, ROSCOE C. 1223 W. Maine, Enid
Ball, Ernest Sulphur
BALLANTINE, H. T. Surety Bldg., Muskogee
BALYEAT, RAY M. 1200 N. Walker, Okla. City
Banks, George W. (C) Hulbert
Barb, Thomas J. V. A. Regional Office, Okla. City
BARBER, GEORGE S. 430 "D", Lawton
Barber, Leslie C. Ralston
Barclay, Carl A. (C) 1624 N. E. Grand Blvd.,
Okla. City
BARHAM, J. H. 311 Daniel Bldg., Tulsa
BARKER, E. R. Healdton
BARKER, PAULINE Guthrie
Barker, M. S. Norman

- BARKETT, N. F. VANDERMed. Arts, Okla. City
 BARNES, HARRY E.905 S. W. 29, Okla. City
 BARRY, GEORGE N.525 N. W. 11, Okla. City
 BARRY, J. R.Picher
 BARTHELD, FLOYDMcAlester
 BASSETT, CLIFFORD M.Cushing
 BATCHELOR, JOHN J.Med. Arts, Okla. City
 Bate, Charles (C)352½ N. Greenwood, Tulsa
 BATES, C. E.Vet. Hospital, Okla. City
 Bates, Charles W.2528½ S. Rob., Okla. City
 BATES, FLOYD M.Ringling
 BAUGH, HAROLD T.Meeker
 BAUM, E. ELDON2544 N. W. 30, Okla. City
 Baum, Frank J.McAlester
 BAXTER, GEORGE S.Shawnee
 BAXTER, JACK W.Shawnee
 BAYLESS, JAMES M.Sapulpa
 BAYLEY, ROBERT H.O. U. Medical School,
 Okla. City
 BAYLOR, R. A.400 N. W. 10, Okla. City
 Baynham, Charles W.Box 170, Okla. City
 BAZE, WALTER J.Chickasha
 Beach, George P.O. U. Med. School, Okla. City
 BEAM, J. P. (H)Oakwood
 Bean, John L.Westville
 BEATY, CHARLES S.1622 Houston, Muskogee
 BEATTY, J. H.Tonkawa
 Becker, Fred W.Altus
 BECKER, L. H.Blackwell
 BEDDOE, HAROLD L.3334 E. 25th Place, Tulsa
 Beddoe, Robert EarlShawnee
 BEDNAR, GERALDMed. Arts, Okla. City
 BEECHWOOD, E. E.Bartlesville
 BEESLEY, W. W. (H)1733 S. Lewis, Tulsa
 BELL, AUSTIN H.301 N. W. 12, Okla. City
 Bell, C. P. (R)Welch
 BELL, J. P.Midwest City
 Bell, James T.Edmond
 Bell, William K. (R)Henryetta
 Beller, CleveO. U. Medical School, Okla. City
 Bender, Herman R.736 N. E. 13, Okla. City
 BENJERDES, T. D.Beaver
 BENNETT, HENRY G., JR.Med. Arts, Okla. City
 BENNETT, HOWARD A.O. U. Medical School,
 Okla. City
 Benning, Charles H.3704 E. Fifth Place, Tulsa
 BENSON, CHARLES L.Cherokee
 BERG, MILTON L.3505 S. Peoria, Tulsa
 BERGER, ELMER S.507 "C", Lawton
 Berggren, Andrew L.Vinita
 BERNELL, WILLIAMHobart
 BERRY, CHARLES N.Med. Arts, Okla. City
 BERRY, CURTISNorman
 BERRY, GILBERT L.430 "D", Lawton
 BERRY, THOMAS M.Eldorado
 Berry, Virgil (R)Okmulgee
 Berry, W. D.Barnes Bldg., Muskogee
 BESON, CLYDE W.Claremore
 BEST, J. C.111 S. Bdwy, Okla. City
 Best, Ralph LeeMed. Arts, Tulsa
 BEVILL, S. D.Poteau
 Beyer, J. Walter1213 S. Peoria, Tulsa
 BIELSTEIN, C. M.300 W. 12, Okla. City
 BILLINGTON, J. JEFFREYMed. Arts, Tulsa
 BINDER, HAROLD J.443½ N. W. 23, Okla. City
 BINKLEY, J. G.Municipal Bldg., Okla. City
 BIRDSONG, GORDON E.Shawnee
 BISBEE, ROWE F.Ada
 BITTING, B. T. (H)Enid
 BIVENS, WILLIAM S.Med. Arts, Tulsa
 BLACHLY, LUCILE SPIRE605 N. W. 10,
 Okla. City
 BLACK, HAROLD J.Med. Arts, Tulsa
 BLACKMER, L. G.Hooker
 BLAKEMORE, JESSE (L) Commercial National Bldg.,
 Muskogee
 BLENDER, JOHN X.Cherokee
- BLOCKSOM, BERGET H.Med. Arts, Tulsa
 BLOSS, C. M., JR.Holdenville
 BLOUNT, W. T.Dnrant
 BLUE, JOHNNY A.Hales Bldg., Okla. City
 BOATRIGT, LLOYD C.Perrine Bldg., Okla. City
 BODINE, CHARLES D.Plaza Court Bldg.,
 Okla. City
 BOGAN, R. J.Bartlesville
 BOGGS, NATHANPerrine Bldg., Okla. City
 BOHAN, KENNETH E.625½ N. W. 10, Okla. City
 BOHLMAN, WILBUR F.Watonga
 Bolene, Robert V.Panls Valley
 Bolinger, E. W.Achille
 BOLLINGER, I. W.Henryetta
 Bond, E. C.Fairfax
 BOND, IRA T.Comanche
 Bond, William L.717 N. W. 9, Okla. City
 BONDURANT, C. P.Med. Arts, Okla. City
 BONHAM, WILLIAM L.Med. Arts, Okla. City
 BONNELL, WILLIAM L.Chickasha
 BOON, U. C.Chickasha
 BOONE, W. B.4117 S. 26 W. Ave., Tulsa
 BOOTH, G. R., SR.Wilburton
 BOOTH, G. R., JR.Wilburton
 Booth, William S.Med. Arts, Tulsa
 BORDER, C. L.217 N. W. 13, Okla. City
 BORECKY, GEORGE L.521 N. W. 11, Okla. City
 BOSWELL, HARRY D.Henryetta
 BOWIE, CARL W.Bristow
 BOYD, HUGHMed. Arts, Tulsa
 Boyd, James JayArdmore
 Boyd, James K.1745 S. St. Louis Ave., Tulsa
 Boyd, Thomas A.Weatherford
 Boyd, William S. (C)El Reno
 BOYER, HAROLD L.Enid
 BOZALIS, GEORGE S.1200 N. Walker, Okla. City
 BRADFIELD, SAMUEL J.Med. Arts, Tulsa
 BRADFORD, VANCE A.Med. Arts, Okla. City
 BRADLEY, FRANKTalihina
 BRADLEY, HAROLD C.Perrine Bldg., Okla. City
 BRADSHAW, JOHN O.Welch
 BRALY, M. K.Mooreland
 BRANHAM, D. W.Med. Arts, Okla. City
 Branson, Charles S.Collinsville
 BRASFIELD, JOHN A.Ada
 BRAUN, J. P.Hobart
 Brazeel, John D.Okmulgee
 BRECO, JOSEPH G. (L)Ada
 Brengle, Daniel D.Perry
 BREWER, A. M.621 N. W. 10, Okla. City
 Brewer, Joel R.Marlow
 BRIGGS, T. H.Coalgate
 BRIGHTON, CHARLES E.604 Cinn., Tulsa
 BRIGHTWELL, R. J.Denver, Colorado
 Britt, Henry A.Snyder
 Brixey, Albin M., Jr.630 N. E. 13, Okla. City
 BROCKSMITH, HENRY A.Court Arcade Bldg.,
 Tulsa
 BROGDEN, JAMES C.Med. Arts, Tulsa
 Brooks, Edward B. (C)320 N. E. 2, Okla. City
 Brooks, J. T.O. U. Med. School, Okla. City
 BROOKSHIRE, J. E. (H)Ritz Bldg., Tulsa
 BROWN, BRUCEMcAlester
 Brown, Byron B.Davis
 BROWN, C. ALTONHome State Bldg., Okla. City
 BROWN, D. NELLO510 N. W. 12, Okla. City
 BROWN, GERSTER W.Med. Arts, Okla. City
 BROWN, H. C.El Reno
 BROWN, JOHN MARION515 N. W. 11, Okla. City
 BROWN, MANUEL1619 E. 15, Tulsa
 BROWN, PAUL R. (H)1614 E. 35th, Tulsa
 BROWN, ROBERT A. (L)Prague
 Brown, Spencer H.Fayetteville, Arkansas
 BROWN, WALTER E.2020 S. Xanthus, Tulsa
 BROWNE, HENRY S.Med. Arts, Tulsa
 Brundage, Bert T.Thomas
 BRUNDAGE, C. L.1200 N. Walker, Okla. City
 BRUTON, L. D.Commercial National Bldg., Muskogee

C

CAILEY, LEO F.	Med. Arts, Okla. City
CALDWELL, CHARLES L.	115 E. 18, Tulsa
CALE, WALTER	Sapulpa
CALHOUN, C. E.	Sand Springs
CALHOUN, WALTER H.	Med. Arts, Tulsa
Callahan, J. S.	Wilburton
CALLAWAY, JOHN R.	Pauls Valley
CAMERON, PAUL B.	Pryor
CAMP, EARL FRED (H)	Buffalo
CAMP, RAY J.	Woodward
CAMPBELL, COYNE H.	2920 Classen, Okla. City
CAMPBELL, HIRAM GILL	Tecumseh
CAMPBELL, J. MOORE	Med. Arts, Okla. City
Campbell, William H.	Chickasha
Campbell, William J.	3505 S. Peoria, Tulsa
CANADA, J. C.	Ada
CANNON, J. M.	210½ S. W. Commerce, Okla. City
CANNON, R. F.	Miami
CANTRELL, D. E., JR.	Healdton
CANTRELL, EMMA JEAN	Healdton
Cantrell, James H.	Lindsay
CAPEHART, JOHN D.	814 N. Osage Dr., Tulsa
CAPEHART, SAMUEL A.	2920 Classen, Okla. City
CAPPS, J. FRED	Tinker Field, Okla. City
CARLOCK, J. HOYLE	Ardmore
CARLOSS, THOMAS C.	Morris
Carmichael, Marvin M.	Osage
CARNEY, ANDRE B.	915 S. Cinn., Tulsa
Carpenter, Richard Everett	413 N. W. 12, Okla. City
CARSON, JOHN M.	Shawnee
CARSON, WILLIAM S.	Keota
CARTER, H. GRAY	525 N. W. 11, Okla. City
CARY, WILLIAM S.	Reydon
CASEY, ROBERT ELSWORTH (J)	601 N. W. 9, Okla. City
Cashman, Charles A.	1330 S. Wheeling, Tulsa
CASPER, PETE D.	2913 Epperly Dr., Del City
CATES, ALBERT M. (H) (R)	2733 N. E. 20th, Okla. City
CATTO, W. B.	El Reno
Cavett, Ernest R.	Loyal
CAVINNESS, J. J.	Med. Arts, Okla. City
CAWLEY, F. P.	Hooker
CHALMERS, J. S.	Sand Springs

Chamberlin, Elizabeth M.	Bartlesville
Chambers, Albert M.	Vet. Hospital, Muskogee
CHAMBERS, CLAUDE S.	Seminole
Chambers, Dorsey P.	Stilwell
CHAMBERS, E. EVANS	610 S. Monroe, Enid
CHAMPLIN, PAUL B.	First Natl. Bank Bldg., Enid
Chandler, Jesse S. (C)	111½ S. 2nd, Muskogee
CHARBONNET, P. N.	Okla. Natural Bldg., Tulsa
CHARNEY, L. H.	Med. Arts, Okla. City
Chase, Warren W.	Barnsdall
CHATHAM, BEVERLY C.	Chickasha
CHEATWOOD, WILLIAM R.	Duncan
Cheek, James A.	Sallisaw
CHESNUT, W. G.	Miami
CHILDERS, J. E.	Tipton
CHILDS, JAMES W.	Med. Arts, Tulsa
CHOICE, ROBERT W.	Wakita
CHUMLEY, CHONNER P.	Vinita
CLARK, ANSON L.	400 N. W. 13, Okla. City
Clark, Guy (R)	Sulphur
Clark, I. R. (R)	Carnegie
CLARK, JOHN BENJAMIN	Coalgate
CLARK, JOHN V.	301 S. W. 23, Okla. City
Clark, Marion Albert (C)	Wynnewood
CLARK, LeMON	400 N. W. 13, Okla. City
CLARK, RALPH O.	301 S. W. 23, Okla. City
Clarkson, A. M.	Valliant
Clarkson, A. W. (R)	Valliant
CLAY, R. A.	416 N. W. 13, Okla. City
Clements, Donald G.	900 N. W. 17, Okla. City
CLIFT, MERL	Blackwell
CLINTON, FRED SEVERS (H)	230 E. Woodward, Tulsa
CLYMER, CYRIL	Med. Arts, Okla. City
COACHMAN, E. H.	Manhattan Bldg., Muskogee
COATES, R. R.	Chickasha
COCHRAN, C. M.	Okemah
Cochran, Roy L.	Caddo
COCHRANE, J. E.	Byars
Cockrill, Harry S.	Mooreland
Coffey, A. V. (C)	Wewoka
Coffield, Abe Walker	Drumright
COGGINS, FARRIS WEBB	Granite
COIL, JENNER G.	Med. Arts, Okla. City
COKER, B. B.	Durant
Coldiron, D. F.	Perry
COLE, WILLIAM CHARLES	605 Gore, Lawton
COLEY, ANDREW JACKSON (H)	1929 N. W. Park, Okla. City
COLEY, JOE H.	416 N. W. 13, Okla. City
COLLINS, D. BRUCE (L)	802 N. 13, Lawton
COLLINS, E. L.	Panama
COLLINS, GLENN S., JR.	Prague
COLLINS, JOE ED (J)	905 S. W. 29, Okla. City
COLLINS, MABELLE S.	905 S. W. 29, Okla. City
Colvert, George W.	Miami
COLVERT, J. R.	400 N. W. 10, Okla. City
COLWICK, J. T.	Durant
COLYAR, A. B.	McAlester
COMBS, LEON DOYLE	Shawnee
COMP, G. A. (H)	Manitou
Cone, Henry Lee	Maud
CONNELL, MATT A.	Picher
CONOVER, GEORGE W., JR.	Anadarko
Conrad, Betty Louise	Sapulpa
Conrad, H. W. (C)	Guthrie
COOK, C. E., JR.	Britton
COOK, EDWARD T., JR.	Anadarko
COOK, ODIS A.	Madill
COOK, W. ALBERT (H)	Med. Arts, Tulsa
COOK, WILLIAM HENRY	Chickasha
COOKE, CHARLES H.	Perry
COOPER, F. MAXEY	Med. Arts, Okla. City
COOPER, N. H.	Ponca City
Coots, William N. (C)	2144 N. St. Louis, Tulsa
COPPEDGE, OMER C.	Bristow
COPPEDGE, OSCAR S.	Depew
CORDONNIER, BYRON J.	Bdwy. Tower, Enid
COSBY, GLENN W.	Miami

F	
FAGIN, HERMAN	521 N. W. 11, Okla. City
FAIR, ELLIS EDWIN	Med. Arts, Okla. City
FAIR, E. N.	Heavener
FARIS, BRUNEL D.	Med. Arts, Okla. City
FARR, LOUISE K.	322 N. E. 11, Okla. City
FARRIS, EDWARD M.	Med. Arts, Okla. City
FARRIS, HANSFORD LEE	Med. Arts, Tulsa
Farris, Robert C.	1111½ S. Lawton, Tulsa
FEAMSTER, R. C.	McAlester
Featherston, William M.	Elk City
FERGUSON, E. GORDON	Med. Arts, Okla. City
FERGUSON, L. W.	Drs. & Dentist Bldg., Lawton
FEILD, JULIAN	610 S. Monroe, Enid
FIFE, PHILLIPS R.	Guthrie
FINA, A. C.	Atoka
FINCH, J. WILLIAM	Hobart
Finley, G. E. (C)	324½ N. E. 2, Okla. City
FIRST, FRANCIS R., SR.	Checotah
FIRST, FRANCIS R., JR.	Checotah
FIRST, SAFETY R.	Med. Arts, Tulsa
FISHER, ROY L.	Frederick
FISHMAN, C. J.	132 N. W. 4, Okla. City
FITE, E. HALSELL	Commercial Natl. Bldg., Muskogee
FITE, W. PAT	Muskogee
FLACK, FRANK E.	Woodward
FLACK, FRANK L.	McFarlin Bldg., Tulsa
FLEETWOOD, DOYLE H.	Edmond
FLESHER, T. H.	Edmond
FLORENCE, JOHN (A)	400 N. W. 13, Okla. City
FLUHR, WILLIAM F. (J)	Van Nuys, California
FOERSTER, HERVEY A.	Med. Arts, Okla. City
Ford, C. E. (C)	Taft
FORD, HARRY C.	Miami
FORD, HERMAN W.	915 S. Cinn., Tulsa
FORREST, HERBERT J.	1859 E. 17, Tulsa
FORRY, WILLIS W.	Bixby
Forsythe, Thomas G.	Allen
FOSHEE, W. C.	Stillwater
FOX, FRED T.	605 Gore, Lawton
FOX, RAYMOND H.	Altus
FOX, WILLIAM W.	Norman
FRANCIS, J. W.	Perry
FRANCISCO, GLENN	Bass Bldg., Enid
Francisco, John W.	Bass Bldg., Enid
FRANK, LOUIS S.	1200 N. Walker, Okla. City
FRANKLIN, ONIS	Broken Arrow
FRANKLIN, SAMUEL E.	1619 E. 15, Tulsa
FREED, LEON C.	Perkins
FREED, HENRY J.	420 N. W. 13, Okla. City
FREEMAN, CHARLES W.	625½ N. W. 10, Okla. City
Frei, Emil, III	Elk City
FREW, A. L., JR.	528 N. W. 12, Okla. City
FRIED, DAVID	Mangum
FRIERSON, S. E.	Med. Arts, Okla. City
FRIZZELL, J. T. (H) (R)	Clinton
FRY, F. P.	Frederick
FRY, MELVIN	Eufaula
FRY, POWELL E.	Stillwater
FRYER, SAMUEL R.	511 N. W. 11, Okla. City
FULCHER, JOSEPH	Med. Arts, Tulsa
Fuller, Tillman (R)	2300 S. Central, Okla. City
FULTON, CLIFFORD C.	Med. Arts, Okla. City
FULTON, GEORGE	American Bank Bldg., Okla. City
Fulton, William R.	Gore
FUNK, ROBERT E.	Med. Arts, Tulsa
FUQUA, W. A.	Grandfield

GABLE, JAMES, JR.	301 N. W. 12, Okla. City
GADDIS, N. C.	1530 S. Peoria, Tulsa
Gaines, John F.	Hoobart
GALBRAITH, HUGH M.	First Natl. Bldg., Okla. City
GALLAGHER, C. A.	610 N. W. 9, Okla. City
GALLAHER, CLINTON	Shawnee
GALLAHER, PAUL C.	Shawnee
GALLAHER, WILLIAM M.	Shawnee
GARDNER, C. C.	Ponca City
Gardner, Robert A.	Marietta
GARNIER, WILLIAM H.	Stillwater
GARRETT, DAVY L.	Med. Arts, Tulsa
GARRISON, GEORGE H.	1200 N. Walker, Okla. City
GART, RONALD J.	V. A. Hospital, Okla. City
GASTINEAU, FELIX T.	Med. Arts, Tulsa
Gayman, B. R.	V. A. Hospital, Muskogee
Gayman, Mack W. (R)	Zena
GEE, L. E.	Broken Bow
GEE, O. J.	Med. Arts, Okla. City
GEE, ROBERT L.	Hugo
Gentry, Isaac L.	Maysville
GENTRY, R. C.	Bartlesville
Gentry, Thomas C.	6820 E. Pine, Tulsa
GEORGE, LAWRENCE J.	Stuart
Gerard, Gabriel Rene	Chickasha
GERARD, RENE G.	Atoka
GHORMLEY, J. G.	Blackwell
GIBBS, ALLEN G.	521 N. W. 11, Okla. City
GIBSON, R. B.	Ponca City
Gibson, Robert W.	Ponca City
GILBERT, JOHN B.	Ponca City
Gill, D. C.	Okmulgee
GILL, WILLIAM T.	Ada
GILLESPIE, CLIFTON P.	Vinita
GILLIAM, WILLIAM C.	Spiro
GILLICK, DAVID (A)	Talihina
GILLILAND, CHAS. E.	Court Arcade, Tulsa
Girod, Charles I.	Anadarko
GLASGOW, JACK G.	4101 N. MacArthur, Okla. City
GLASS, FRED A.	2020 S. Xanthus, Tulsa
GLASSCOCK, THOMAS C.	Ponca City
GLISMANN, JOHN D.	Holdenville
GLISMANN, M. B.	1019 N. Lee, Okla. City
GLOMSET, JOHN L.	2420 Classen, Okla. City
GODDARD, ROY KEENE	Skiatook
GODFREY, JAMES T., JR.	Ardmore
GOEN, RAYBURNE W.	Braniff Bldg., Tulsa
GOLDBERGER, J. H.	El Reno
GOLDFAIN, E.	228 N. W. 13, Okla. City
GOODHUE, W. W.	(Navy) Hawaii
GOODMAN, GEORGE L.	Yukon
GOODMAN, SAMUEL	Med. Arts, Tulsa
GOODRICH, ELMER E.	Chickasha
GOODWIN, R. Q.	Med. Arts, Okla. City
GORDON, D. M.	Ponca City
GORDON, J. M.	Ardmore
GORDON, MINOR E.	Claremore
GORRELL, BEN F.	Med. Arts, Tulsa
GORRELL, JOHN F.	Med. Arts, Tulsa
GOSSOM, K. D. (H) (R)	Clinton
Gottschalk, Paul R.	Bartlesville
Govan, Thomas P. (R)	Pawhuska
GOWEY, H. O.	Newkirk
GRAENING, P. K.	Med. Arts, Okla. City
GRAHAM, ALLISON T.	26 S. W. 25, Okla. City
GRAHAM, HUGH C.	1307 S. Main, Tulsa
GRAHAM, JOHN ANDREW	Pauls Valley
GRAHAM, REX	Miami
GRANTHAM, ELIZABETH (H)	Alva
Graves, James R.	Westville
GRAY, DAN F. (L)	Guthrie
Gray, Ethel Lovier B.	1117 N. Shartel, Okla. City
GRAY, FLOYD	1200 N. Walker, Okla. City
GRAY, JOHN F., JR.	2524 Harvard Pl., Tulsa
Gray, J. T. (R)	Stillwater
GRAY, V. B.	Surety Bldg., Muskogee
Gray, William J.	Marietta

GRAYBILL, CHARLES S.605 Gore, Lawton
 GREEN, CHARLES EUGENE605 Gore, Lawton
 GREEN, HARRYMed. Arts, Tulsa
 Green, James L., Jr.540 Baltimore, Muskogee
 GREEN, O. I.Bartlesville
 GREENBERGER, E. D.McAlester
 GREGG, O. R.Norman
 GREGSTON, JACK L.Marlow
 GRIFFIN, D. W.Norman
 Griffin, William F.Watonga
 GRIGSBY, O. L.Nowata
 GRIMES, JOHN P.Wewoka
 Groom, Walter W. (R)McAlester
 GROSS, THOMAS F.Lindsay
 GROSSHART, PAUL L.Med. Arts, Tulsa
 Guess, James Edward (C)Okmulgee
 GUILD, C. H., SR.Shidler
 GULLATT, E. M.Ada
 GUTHREY, G. H.510 N. W. 12, Okla. City
 Guthrie, A. L.2528 S. Rob., Okla. City
 Gyles, Wm. T.Rush Springs

H

HAAS, HARRY R.Sapulpa
 Haberly, S. S.Wapanucka
 HACKLER, H. W.Norman
 HACKLER, JOHN F.City-County Health Dept.,
 Muskogee
 HADDOCK, JIMNorman
 HADDOCK, PHILNorman
 HADDOX, C. H.Pawnee
 HAGG, O. J.Waurika
 HAHN, L. A.Guthrie
 HALE, FORESTCherokee
 HALL, CLARK H.Med. Arts, Okla. City
 HALL, GILBERT H. (H)15 W. 3, Tulsa
 HALL, HARRY B.Boise City
 HALL, ROY L.Bass Bldg., Enid
 HAMBLE, VIRGIL R.Tower Bldg., Enid
 Hamilton, E. B.Wilburton
 Hamilton, J. G. (R)Bethel
 Hamilton, Robert LutherSand Springs
 HAMILTON, S. H.Non
 HAMM, LESLIE T.Koehler Bldg., Lawton
 HAMM, SILAS G.Haskell
 Hampton, James B., Jr.Miami
 Hampton, James B.Miami
 HANSEN, M. FRED. (A)Attorney Generals Office,
 Okla. City
 HARALSON, CHARLES H.Med. Arts, Tulsa
 HARBER, J. N. (H)Phoenix, Arizona
 HARBISON, FRANK436 N. W. 12, Okla. City
 HARBISON, J. E. (L)436 N. W. 12, Okla. City
 HARDMAN, THOMAS J.Med. Arts, Tulsa
 HARDY, I. V. (L)Medford
 HARDY, WALTER (L)Ardmore
 HARKINS, RICHARD A.McAlester
 HARNED, WILLIAM B.Walters
 Harper, C. W.Bethany
 HARRIS, BUNNJenks
 HARRIS, CLYDE E.2419 N. Walker, Okla. City
 HARRIS, DAVID S.Drummond
 HARRIS, G. G.Helena
 HARRIS, HENRY W.1200 N. Walker, Okla. City
 HARRIS, RICHARD L.1200 N. Walker, Okla. City
 Harris, Russell David605 N. W. 10, Okla. City
 HARRISON, LYNN H.2515 Classen, Okla. City
 HARRISON, STEARLEY P.Med. Arts, Okla. City
 Harrison, Thomas F. (R)Maud
 HART, MABLE M.602 S. Cheyenne, Tulsa
 HART, MARSHALL O.1228 S. Boulder, Tulsa
 HARTFORD, WALTER K.Med. Arts, Okla. City
 Hartshorne, George E.Milner Hotel, Muskogee
 Hartshorne, W. O.Spiro
 HARVEY, JOHN H.Heavener
 HASKETT, PAUL E.Hales Bldg., Okla. City
 HASLAM, G. E.Anadarko

HASSLER, F. R.St. Health Dept., Okla. City
 HASSLER, GRACE CLAUSEMed. Arts, Okla. City
 HATHAWAY, ALFRED H. (L)Mountain View
 HATHAWAY, W. G.Lone Grove
 HAUGEN, I. J.Ada
 HAWES, CHARLES R.Norman
 Hawks, Edwin A. (R)1302 S. Rockford, Tulsa
 HAWN, W. T.Binger
 HAYES, BASIL A.625 N. W. 10, Okla. City
 HAYES, R. B. (L)Guymon
 HAYGOOD, CHARLES W.Shawnee
 Hayne, Robert A.604 S. Cinn., Tulsa
 HAYNES, WILLIAMHenryetta
 HAYNIE, W. K.Durant
 HAYS, LUVERN2445 E. 27, Tulsa
 Hays, Carolyn C. AdamsCounty Health Dept.,
 Okla. City
 Hays, Marvin Bryant1119 N. E. 20, Okla. City
 HAYS, P. L.Vinita
 Haywood, W. L. (C)307½ N. E. 2, Okla. City
 HAZEL, ONIS G.Med. Arts, Okla. City
 HEAD, ROBERT W.Idabel
 HEATLEY, JOHN E.Med. Arts, Okla. City
 HEFLIN, WILLIAM A.Duncan
 HENDERSON, F. W.2541 E. 11, Tulsa
 HENDREN, SCOTT216½ S. W. 25, Okla. City
 HENKE, JOSEPH R.Hydro
 HENLEY, MARVIN D.Med. Arts, Tulsa
 HENNINGS, ALBERT E.Tuttle
 Henry, E. P. (C)Taft
 HENRY, EUGENE M.Commercial Natl. Bldg.,
 Muskogee
 HENRY, GIFFORD H.Court Arcade Bldg., Tulsa
 HENRY, MILLARD L.McAlester
 Henry, Russell ColeAltus
 Henry, T. L.Wilburton
 HEROD, P. F.El Reno
 HERRMANN, JESS D.521 N. W. 11, Okla. City
 Hetherington, Albert J.2014 Gatewood, Okla. City
 HETHERINGTON, L. P.Miami
 HEWITT, PERRY E.Manhattan Bldg., Muskogee
 HICKS, CASPER A.Holdenville
 HICKS, FRED B.Med. Arts, Okla. City
 HIGGINS, H. A. (L)Ardmore
 HIGHLAND, J. E.Miami
 Hightower, Harry G.Hobart
 HILL, C. B. (L)Guthrie
 Hill, George W. (C)Ardmore
 Hill, Harry K.Laverne
 HILL, O. L.915 S. Cinn., Tulsa
 HILL, ROBERT M. C. (H)McLoud
 HILL, T. A.Cleveland
 HINDMAN, W. M.Okla. Nat'l. Bldg., Tulsa
 HINES, S. J. T.Tahlequah
 HINMAN, E. HAROLD (A)Norman
 HINSHAW, J. R.Norman
 HINSON, BRUCE R.330 S. 5th, Enid
 HIRSHFIELD, A. C.Med. Arts, Okla. City
 Hitch, Walter M.1716 Oak Ave., Lawton
 HOBBS, A. F.Hinton
 HODGSON, C. M.Kingfisher
 HOGABOOM, G. M.Heavener
 HOHL, JAMES F.Norman
 HOKE, C. C.Philtower Bldg., Tulsa
 HOLBROOK, R. W. (H)Perkins
 Holcomb, John L.Vian
 HOLCOMB, MARK D.Broadway Tower, Enid
 Holcombe, George M. (R)Okeene
 HOLCOMBE, R. NOLANSurety Bldg., Muskogee
 Holliday, Oliver M. (R)1744 E. 13th Place, Tulsa
 HOLLINGSWORTH, FRANCIS W.El Reno
 HOLLIS JESSE B.Mangum
 HOLLIS, JOSEPH E.Bristow
 HOLLIS, LYNN ESTILTinker Field, Okla. City
 HOLMES, A. R.Henryetta
 Holoway, Thomas B.Ardmore

HOLSTED, ALBERT B. Temple
HOLT, ROBERT P. 301 N. W. 12, Okla. City
HOLT, WILLARD D. Altus
HOOD, F. REDDING 1200 N. Walker, Okla. City
HOOD, JAMES O. Norman
Hooper, E. C. Idabel
HOOPER, J. S. (H) Vet. Hospital, Muskogee
HOOVER, W. D. Standolind Bldg., Tulsa
HOPKINS, GLENN Guymon
HOPKINS, P. W. Bdwy. Tower, Enid
HOPPS, HOWARD C. O. U. Med. School, Okla. City
HORN, JOHN E. 1620 W. Okmulgee, Muskogee
HORN, MALCOLM Ardmore
HOTZ, CARL J. 604 S. Cinn., Tulsa
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Houser, Wm. A. (R) Durant
HOWARD, HERBERT H. Lawton Clinic, Lawton
HOWARD, ROBERT B. 1200 N. Walker, Okla. City
HOWARD, ROBERT M. (L) 1200 N. Walker, Okla. City
Howard, Thomas Idabel
HOWARD, W. A. Chelsea
HOWE, J. H. Ponca City
HOWELL, HENRY A. Holdenville
HOWELL, O. E. (H) Norman
Howell, Y. A. Mountain View
HOYT, ARTHUR W. Chickasha
Hubbard, John C. 1501 N. E. 11, Okla. City
HUBBARD, JOHN R. 1501 N. E. 11, Okla. City
HUBBARD, RALPH W. 1501 N. E. 11, Okla. City
HUBBARD, WILLIAM E. 1501 N. E. 11, Okla. City
HUBBARD, WILLIAM E. Tipton
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HUDSON, H. H. 610 S. Monroe, Enid
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HULSE, CHARLES A. 604 S. Cinn., Tulsa
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HUMPHREY, J. H. Mooreland
HUMPHREYS, D. W. Cushing
Huntington, C. S. Bartlesville
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HUSTON, HENRY EDWIN (L) (R) Grove
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KERNEK, CLYDE Holdenville
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KING, EMERY W. Bristow
King, Sidney W. Elk City

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 Kouri, PaulRyan
 Kraft, James E.Vinita
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 Le BLANC, WILLIAMOchelata
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 LeHEW, JOHN L., JR.Guthrie
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 LUBIN, EMANUEL N.Med. Arts, Tulsa
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 Lucas, John H. C. (C)Clearview
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 McCALIB, D. C. (L)Colbert
 McCann, William E. F.1923 S. Utica, Tulsa
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 McCarey, Wardlow H. (R)Colbert
 McCarty, C. W.1429 S. Main, Tulsa
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 McClain, William Z.Marlow
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 McClure, P. L. (H)Ft. Cobb
 McClure, WILLIAM C.1200 N. Walker, Okla. City
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 McCONNELL, L. H.Altus
 McCoy, RONALDAtwater, Kansas
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 McCREIGHT, WILLIAM G.525 N. W. 11, Okla. City
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 McCURDY, WILLIAM C., SR.Purcell
 McCURDY, WILLIAM C., JR.Purcell
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 McDONALD, GLEN W.Pawhuska
 McDONALD, JOHN EDWINTri-State Bldg., Tulsa
 McDUGAL, BURTON B.Chickasha

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McGEE, J. P.1200 N. Walker, Okla. City
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McGRATH, T. J.Sayre
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McLAUCHLIN, ROBERT ALLENOkeene
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McMILLAN, C. B.Gracemont
McMILLAN, JAMES M.Vinita
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MARTIN, CHESLEY M.Elgin
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MARTIN, FRANK J.Ada
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MARTIN, JOHN W.Cushing
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MARTIN, RALPH F.Sand Springs
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MATTHEWS, SANFORD400 N. W. 10, Okla. City
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 PATTERSON, FRED L. Duncan
 PATTERSON, FRED L., JR. Duncan
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 PERRY, FRED T. Okeene
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 Pugh, John Henry (C) Okmulgee
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 Putnam, William B. Carnegie
 Pyle, Oscar S. (R) Chickasha

Q

Quenzer, Fred A. V. A. Hospital, Okla. City

R

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 RAFTER, JOHN R. Manhattan Bldg., Muskogee
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 RENFROW, T. F. (H) Vets Hosp., North Little Rock, Ark.
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 REWERTS, F. C. Bartlesville
 REYNOLDS, J. L. Orpheum Bldg., Tulsa
 REYNOLDS, JACK HAYNES Barnes Bldg., Muskogee
 REYNOLDS, JOHN First Natl. Bank, Muskogee
 REYNOLDS, STEPHEN W. Drumright
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 RICE, O. W. (L) McAlester
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- (L) Life Members
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Graves, James R. Westville

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Holcombe, George M. (R) Okeene
Leisure, John B. Watonga
McLAUCHLIN, ROBERT A. Okeene
MILLIGAN, E. F. Geary
PERRY, FRED T. Okeene
RICHARDSON, DARWIN L. Okeene
ROGERS, C. L. Canton
STOUGH, DANIEL F. Geary

BRYAN COUNTY

BAKER, ALFRED T. Durant
BLOUNT, W. T. Durant

Bolinger, E. W. Achille
Cochran, Roy L. Caddo
COKER, B. B. Durant
COLWICK, J. T. Durant
HAYNIE, W. K. Durant
Houser, Wm. A. (R) Durant
HYDE, W. A. Durant
McCALIB, D. C. (L) Colbert
McCarley, Wardlow Howard (R) Colbert
MOORE, C. F. Durant
MOORE, W. L. Bokchito
PRICE, C. G. Durant
RAINES, S. W. Calera
SAWYER, R. E. Durant
Toney, S. M. Bennington
WILLIAMS, J. C. Durant
WITT, ROGER W. Durant
WOODS, E. BRYANT Durant

CADDO COUNTY

Booth, William E. Sickles
Clark, I. R. (R) Carnegie
CONOVER, GEORGE W., JR. Anadarko
COOK, EDWARD T. Anadarko
DIXON, W. L. Cement
Girod, Charles I. Anadarko
HASLAM, G. E. Anadarko
HAWN, W. T. Binger
HENKE, JOSEPH R. Hydro
HOBBS, A. F. Hinton
INMAN, EDWARD L. Apache
Johnston, R. E. Anadarko
KERLEY, W. W. (H) Anadarko
McCLURE, P. L. (H) Ft. Cobb
McMILLAN, C. B. Gracemont
Manor, W. R. Kiowa Indian Hospital, Anadarko
MILES, J. B. Anadarko
MINOR, S. W. Hinton
Putnam, William B. Carnegie
ROGERS, F. W. Carnegie
SMITH, P. F. Carnegie
SULLIVAN, C. B. Carnegie
Vann, Wade H. Cement
WATERBURY, C. R. Apache
WILLIAMS, R. W. Anadarko

CANADIAN COUNTY

BROWN, H. C. El Reno
Boyd, William S. (C) El Reno
CATTO, W. B. El Reno
GOLDBERGER, J. H. El Reno
GOODMAN, GEORGE L. Yukon
HEROD, P. F. El Reno
HOLLINGSWORTH, FRANCIS W. El Reno
JOHNSON, A. L. El Reno
LAWTON, W. P. El Reno
MOGAB, JOHN H. El Reno
MYERS, JACK W. El Reno
NEUMANN, MILTON A. Okarche
OTTIS, PAUL JOSEPH Okarche
(Member of Garfield-Kingfisher County Medical Society)
PHELPS, JOSEPH T. El Reno
PHELPS, MALCOM E. El Reno

RICHARDSON, D. P. (H)	Union City
RILEY, JAMES T.	El Reno
STRONG, C. RILEY	El Reno
TOMKINS, J. E. (L)	Yukon
WALKER, ETHAN A.	Yukon
Wolff, L. G. (R)	Okarche

ATOKA COUNTY

Dale, Charles Dorsey	Atoka
FINA, A. C.	Atoka
GERARD, RENE G.	Atoka

CARTER COUNTY

ASHER, JAMES O.	Ardmore
BARKER, E. R.	Healdton
Boyd, James J.	Ardmore
CANTRELL, D. E., JR.	Healdton
CANTRELL, EMMA JEAN	Healdton
CARLOCK, J. HOYLE	Ardmore
COX, J. L.	Ardmore
CUNNINGHAM, C. D.	Ardmore
Darling, William A.	Wilson
GODFREY, JAMES T., JR.	Ardmore
GORDON, J. M.	Ardmore
HARDY, WALTER (L)	Ardmore
HATHAWAY, W. G.	Lone Grove
HIGGINS, H. A. (H)	Ardmore
Hill, George Washington (C)	Ardmore
Holloway, Thomas B. (R)	Ardmore
HORN, MALCOLM	Ardmore
JESSE, CLARON H.	Ardmore
Johnson, Carroll A.	Ardmore
JOHNSON, WALTER	Ardmore
JOHNSON, G. E.	Ardmore
JONDAHL, WILLIS H.	Harlingen, Texas
KELL, THORNTON	Ardmore
KARLICK, JOSEPH R.	Ardmore
Ketchersid, John W. (R)	Ardmore
LONG, LOYD L., JR.	Ardmore
McCONNELL, J. B.	Ardmore
McGuffin, Anetta T.	Ardmore
McGuffin, Devere W.	Ardmore
Maloney, Vance J., Jr.	Ardmore
MOTE, W. R.	Ardmore
MOXLEY, JOE N.	Ardmore
Parish, Richard M.	Ardmore
REID, ROGER	Ardmore
Ryann, Henry G.	Healdton
SULLIVAN, R. C.	Ardmore
TRUMAN, A. W.	Ardmore
VEAZEY, J. HOBSON	Ardmore
VEAZEY, L. C.	Ardmore
WALKER, ETHEL M.	Ardmore

CHEROKEE COUNTY

ALLISON, JOHN S.	Tahlequah
Banks, George W.	Hulbert
HINES, S. J. T.	Tahlequah
Johnson, Jasper J.	Tahlequah
McINTOSH, R. K.	Tahlequah
MASTERS, HERBERT A.	Tahlequah
MEDEARIS, P. H.	Tahlequah
Parkhurst, Yale E.	Tahlequah

CHOCTAW COUNTY

GEE, ROBERT L.	Hugo
JOHNSON, E. A.	Hugo
MOORE, J. D.	Hugo
Shull, Russell J.	Hugo
SWITZER, FRED D.	Hugo
WATERS, FLOYD L.	Hugo
Waters, Gregory R.	Hugo
WOLFE, HENRY D.	Hugo

CIMARRON COUNTY

HALL, HARRY B.	Boise City
(Member of Texas County Medical Society)	

CLEVELAND COUNTY

ATKINS, W. H. (J)	Norman
Barker, M. S.	Central State Hospital, Norman
BERRY, CURTIS	Norman
BUFFINGTON, F. C.	Norman
DUDLEY, ALBERTA WEBB	Central State Hospital, Norman
FOX, WILLIAM W.	Norman
GREGG, O. R.	Norman
GRIFFIN, D. W.	Central State Hospital, Norman
HACKLER, H. W.	Norman
HADDOCK, JIM	Norman
HADDOCK, PHIL	Norman
HAWES, CHARLES R.	Norman
HINMAN, E. HAROLD (A)	Norman
HINSHAW, J. R.	Norman
HOHL, JAMES F.	Norman
HOOD, JAMES O.	Norman
LAMBERT, J. B.	Lexington
MAYFIELD, W. T.	Norman
MERRITT, IVA S.	Norman
MITCHELL, CLARENCE	Norman
Mosely, Kirk T.	Norman
NICHOLSON, JAMES L.	Norman
NIELSEN, GERTRUDE	Norman
O'LEARY, D. W.	Norman
RAGAN, T. A.	Norman
REICHERT, R. J.	Moore
RIEGER, J. A.	Norman
RUDE, EVELYN MAE	(Arabia) Asia
RYAN, R. O.	Norman
Snoddy, William T.	Norman
STEPHENS, EDWARD F.	Norman
STOOPS, W. A.	Norman
Wells, Gould T.	Norman
WICKHAM, W. W.	Norman
WILEY, G. A.	Norman
WILLARD, D. G.	Norman
WITTEN, H. B. (J)	V. A. Hospital, Gulfport, Mississippi
WINKELMAN, GEORGE W.	Norman
WOODSON, ORVILLE M.	Norman

COAL COUNTY

BRIGGS, T. H.	Coalgate
CLARK, J. B.	Coalgate

COMANCHE COUNTY

ANGUS, DONALD	614 "C", Lawton
ANGUS, H. A.	614 "C", Lawton
ANGUS, HOWARD	614 "C", Lawton
AYCOCK, BYRON	1711 Cherry, Lawton
BARBER, GEORGE S.	430 "D", Lawton
BERGER, E. STANLEY	507 C. St., Lawton
BERRY, G. L.	430 "D", Lawton
Bryce, James Robert	Indianahoma
COLE, WILLIAM C.	605 Gore, Lawton
COLLINS, D. B. (L) (R)	802 N. 13, Lawton
DUNNING, G. G.	605 Gore, Lawton
DUNLAP, E. B.	1006 B. Ave, Lawton
EVANS, H. M.	214 S. 4th, Lawton
FERGUSON, L. W.	Drs. & Dent. Bldg., Lawton
FOX, FRED T.	605 Gore, Lawton
GRAYBILL, CHARLES S.	605 Gore, Lawton
GREEN, CHARLES E.	605 Gore, Lawton
HAMM, LESLIE T.	Koehler Bldg., Lawton
Hitch, Walter M.	1716 Oak Ave, Lawton
HOWARD, HERBERT HARDIN	Lawton Clinic, Lawton

Hues, Charles P.	1012 C., Lawton
JOYCE, CHARLES W.	Fletcher
Knee, Lorin C. (R)	405 A., Ave, Lawton
LEWIS, W. F.	605 Gore, Lawton
MARTIN, C. M.	Elgiu
MITCHELL, J. N.	Koehler Bldg., Lawton
Owens, Eugene A. (C)	202½ N. W. 1, Lawton
PARSONS, O. L.	511 E. Ave, Lawton
Rowell, James Frederick (R)	Meers
Sanders, Matthew J.	713 "D", Lawton
WICKER, WALTER, JR.	605 Gore, Lawton

COTTON COUNTY

BAKER, GEORGE W.	Walters
HOLSTED, A. B.	Temple
McGRAW, WILLARD L.	Walters
SCISM, MOLLIE F. J.	Walters
SMITH, HENRY C.	Walters

CRAIG COUNTY

ADAMS, FELIX M.	Vinita
Bell, C. P. (R)	Welch
BERGGREN, ANDREW L.	Vinita
BRADSHAW, J. O.	Welch
CHUMLEY, C. P.	Vinita
DARROUGH, JAMES B.	Vinita
GILLESPIE, CLIFTON P.	Vinita
HAYS, P. L.	Vinita
Kraft, James E.	Vinita
LEHMER, E. E.	Vinita
MARKE, W. R.	Vinita
McMILLAN, J. M.	Vinita
McPIKE, L. H.	Vinita
MITCHELL, ROBERT L.	Vinita
OLSON, DONALD H.	Vinita
Sharpe, George Thomas (C)	Vinita
WITCHER, EDWARD K.	Vinita

CREEK COUNTY

BAYLESS, JAMES	Sapulpa
BOWIE, CARL W.	Bristow
CALE, WALTER	Sapulpa
Coffield, A. W.	Drumright
Conrad, Betty Louise	Sapulpa
COPPEDGE, O. C.	Bristow
Coppedge, O. N.	Bristow
COPPEDGE, O. S.	Depew
COWART, O. H.	Bristow
CURRY, J. F.	Sapulpa
HAAS, HARRY R.	Sapulpa
HOLLIS, J. E.	Bristow
JOSEPH, PHILIP	Sapulpa
Kennedy, John A.	Mounds
KING, E. W.	Bristow
LEWIS, P. K.	Sapulpa
MARTIN, A.	Sapulpa
MOTE, PAUL	Sapulpa
Neal, William J.	Drumright
OAKES, CHARLES G.	Sapulpa
Phillips, John W.	Oilton
REESE, C. B. (L)	Sapulpa
REYNOLDS, S. W.	Drumright
SISLER, FRANK H.	Bristow
SISLER, FRANK, JR.	Bristow
STARR, O. W.	Drumright
Wharton, Jesse L.	Depew

CUSTER COUNTY

ALEXANDER, CHARLES J.	Clinton
Boyd, Thomas A.	Weatherford
Brundage, Bert T.	Thomas
CUNNINGHAM, CURTIS B.	Clinton
DEPUTY, ROSS	Clinton
DOBBINS, THOS.	Clinton
Doler, Calhoun	Clinton
FRIZZELL, J. T. (H) (R)	Clinton
GOSSOM, K. D. (H) (R)	Clinton
LAIN, W. B.	Clinton
LAMB, ELLIS	Clinton
LINGENFELTER, PAUL B.	Clinton
McBurney, C. H. (R)	Clinton

McGOLRICK, J. B.	Clinton
PERRY, J. M.	Custer City
ROGERS, McLAIN (H)	Clinton
SIMON, FLOYD	Clinton
SIMON, RALPH	Clinton
STOLL, A. A.	Clinton
TISDAL, J. H.	Clinton
TISDAL, W. C.	Clinton
VIEREGG, F. R.	Clinton
WILLIAMS, G. D.	Weatherford
WOOD, J. G.	Weatherford

DELAWARE COUNTY

Cowan, William R.	Jay
Gayman, Mack Willis (R)	Zena
HUSTON, HENRY EDWIN (L)	Grove
Linman, Thomas W.	Colcord
WALKER, CHARLES F.	Grove
(Member of Ottawa County Medical Society)	
Wellman, Clarence L.	Grove

DEWEY COUNTY

BEAM, J. P. (H)	Oakwood
(Member of Northwestern Counties Medical Society)	
Keys, E. C.	Taloga
MABRY, W. L.	Leedey
(Member of Beckham County Medical Society)	
McNEAL, DON, JR.	Taloga
(Member Canadian County Medical Society)	
MILLER, WILLIAM ROBERT	Taloga
Rolle, Paul N.	Seiling
SEBA, WILLIAM E.	Leedey
(Member of Beckham County Medical Society)	

ELLIS COUNTY

NEWMAN, FLOYD	Shattuck
(Member Northwestern Counties Medical Society)	
NEWMAN, M. H.	Shattuck
(Member Northwestern Counties Medical Society)	
NEWMAN, O. C.	Shattuck
(Member Northwestern Counties Medical Society)	
NEWMAN, ROY E.	Shattuck
(Member Northwestern Counties Medical Society)	
SMITH, J. J.	Shattuck
(Member Northwestern Counties Medical Society)	
Irvin, George E.	Gage

GARFIELD COUNTY

BAKER, ROSCOE C.	1223 W. Maine, Enid
BITTING, BENJAMIN THOMAS (H)	1721 W. Maine, Enid
CHAMBERS, E. EVANS	610 S. Monroe, Enid
CHAMPLIN, PAUL B.	First National Bank Bldg., Enid
CORDONNIER, BYRON J.	Bdwy. Tower, Enid
DOUGAN, ARCHIE F.	Bdwy. Tower, Enid
DUFFY, FRANCIS M.	211 W. Maple, Enid
DUGGER, JAMES ATWOOD	610 S. Monroe, Enid
FIELD, JULIAN	610 S. Monroe, Enid
FRANCISCO, GLENN	Bass Bldg., Enid
Francisco, John Winfield	Bass Bldg., Enid
HALL, R. L.	Bass Bldg., Enid
HAMBLE, V. R.	Bdwy. Tower, Enid
HARRIS, D. S.	Drummond
HINSON, BRUCE R.	330 S. 5, Enid
HOLCOMB, MARK D.	Bdwy. Tower, Enid
HOPKINS, P. W.	Bdwy. Tower, Enid
HUDSON, F. A.	610 S. Monroe, Enid
HUDSON, H. H.	610 S. Monroe, Enid
HYER, J. V.	Garber
JACOBS, RAYMOND G.	310 S. 5, Enid
Jones, F. S. (C)	221 E. Market, Enid
Lamerton, William E.	First National Bank Bldg., Enid
McEVOY, S. H.	610 S. Monroe, Enid
McINTYRE, JOHN A.	Bdwy. Tower, Enid
MERCER, J. WENDALL	First National Bank Bldg., Enid
NEILSON, W. P.	Bdwy. Tower, Enid
NEWELL, WALDO B., JR.	230 S. 5th, Enid
NEWELL, W. B.	Bdwy. Tower, Enid
Parker, Homer G.	Douglas
REMPEL, PAUL H.	Bdwy. Tower, Enid
Rhodes, W. H. (R)	1714 W. Okla., Enid
ROBERTS, CHARLES J.	610 S. Monroe, Enid

ROBERTS, D. D.	502 W. Randolph, Enid
ROBINSON, EARL W.	610 S. Monroe, Enid
ROBINSON, LILLIAN H.	610 S. Monroe, Enid
ROSS, GEORGE T.	First National Bank Bldg., Enid
ROSS, HOPE S.	First National Bank Bldg., Enid
SHEETS, MARION E.	310 S. 5, Enid
SHIELD, HERBERT B., JR.	Bdwy. Tower, Enid
SHRYOCK, LELAND F.	Bdwy. Tower, Enid
SHUTTEE, ROBERT D.	Bass Bldg., Enid
Slusher, Wm.	310 Kenwood Blvd., Enid
TAGGE, JAMES F.	First National Bldg., Enid
TALLEY, EVANS E.	Bdwy. Tower, Enid
VANDEVER, H. F.	First National Bank Bldg., Enid
WALKER, JOHN R. (R) (H)	1625 E. Bdwy., Enid
WIGHT, AVERY B.	Bass Bldg., Enid
Wilkins, Archie E.	Covington
WILSON, GEORGE S.	610 S. Monroe, Enid

GARVIN COUNTY

Bolene, Robert V.	Pauls Valley
BYRD, JAMES N.	Pauls Valley
CALLAWAY, JOHN R.	Pauls Valley
Cantrell, James H.	Lindsay
Clark, Marion A. (C)	Wynnewood
Gentry, I. L.	Maysville
GRAHAM, JOHN A.	Pauls Valley
GROSS, THOMAS F.	Lindsay
LINDSEY, RAY H.	Pauls Valley
MAYES, R. W.	Lindsay
MONROE, HUGH H.	Pauls Valley
Morton, Edward L. (R)	Hennepin
ROBBERTSON, MORTON E.	Wynnewood
ROBBERTSON, MARVIN E.	Wynnewood
SHI, AUGUSTIN H.	Stratford
SHIRLEY, EDWARD T.	Wynnewood
SMITH, WILLIAM H.	Lindsay
SPENCE, RAY E.	Maysville
STEEN, CARL T.	Pauls Valley
WALTRIP, JESSE RAY	Pauls Valley
WILSON, DONALD J.	Pauls Valley

GRADY COUNTY

BAZE, WALTER J.	Chickasha
BOON, U. C.	Chickasha
BONNELL, W. L.	Chickasha
Campbell, William H.	Chickasha
CHATHAM, BEVERLY C.	Chickasha
COATES, R. R.	Chickasha
COOK, W. H.	Chickasha
DAVIS, WESLEY W.	Chickasha
DOWNEY, D. S.	Chickasha
Emanuel, Lewis Edgar (R)	Chickasha
Evans, Leo R.	Pocasset
Fry, Melvin	Alex
Gerard, Gabriel Rene (R)	Chickasha
GOODRICH, ELMER E.	Chickasha
Gyles, Wm. T.	Rush Springs
HENNINGES, ALBERT E.	Tuttle
HOYT, ARTHUR W.	Chickasha
LITTLE, AARON C.	Minco
McDOUGAL, BURTON B.	Chickasha
McCLURE, H. M.	Chickasha
McDonald, J. J.	Chickasha
McVey, George M. (R)	Verden
MACUMBER, HAROLD H.	Chickasha
MASON, REBECCA H.	Chickasha
MITCHELL, C. P.	Chickasha
OHL, CHARLES W.	Chickasha
Pyle, Oscar Snow (R)	Chickasha
RENEGAR, JAMES F.	Tuttle
REVERE, SETH D.	Chickasha
SHELBY, RICHARD D.	Chickasha
STOLL, RICHARD G.	Chickasha
SWAN, JOSEPH J.	Chickasha
TERRY, CHARLES T. (C)	Chickasha
Walker, James Allen	Chickasha
WOODS, LOUIS E.	Chickasha

GRANT COUNTY

CHOICE, R. W.	Wakita
CULWELL, WILLIAM B. (L)	Warner
HARDY, I. V.	Medford

Keeler, E. T.	Lamont
KINNAN, LEON F.	Medford
Lawson, E. E.	Medford
ROBINSON, F. P.	Pond Creek
Thompson, E. M.	Warner
STALKER, H. A.	Pond Creek

GREER COUNTY

COGGINS, FARRIS WEBB	Granite
FRIED, DAVID	Mangum
HOLLIS, JESSE B.	Mangum
LANDSEN, JOHN B.	Granite
LEWIS, R. W.	Granite
LOWE, JAMES THEODORE	Mangum
PARMLEY, VAN S.	Mangum
PEARSON, LEB E.	Mangum
PIERSON, DWIGHT D.	Mangum
POER, E. M.	Mangum
SELLERS, FRED W.	Mangum
WAINWRIGHT, TOM	Mangum
(Member Oklahoma County Medical Society)	
Willis, Thomas L.	Granite

HARMON COUNTY

LYNCH, RUSSELL H.	Hollis
Miller, Jess E.	Hollis
SRIGLEY, ROBERT S.	Hollis
(Member Jackson County Medical Society)	
STREET, O. J. (H)	Gould
YEARGAN, WILLIAM M. (H) (R)	Hollis

HARPER COUNTY

CAMP, EARL FRED (H)	Buffalo
(Member Northwestern Counties Medical Society)	
Hill, Harry K.	Laverne
WALKER, H. M.	Buffalo
(Member Northwestern Counties Medical Society)	

HASKELL COUNTY

CARSON, WILLIAM S.	Keota
ROBERTS, K. N.	Stigler
RUMLEY, J. C.	Stigler
Thompson, William A. (R)	Stigler
WILLIAMS, N. K.	McCurtain

HUGHES COUNTY

BLOSS, C. M., JR.	Holdenville
GEORGE, LAWRENCE J.	Stuart
GLISSMAN, JOHN D.	Holdenville
HAMILTON, S. H.	Non
HICKS, C. A.	Holdenville
HOWELL, HENRY A.	Holdenville
JOHNSTON, L. A. S.	Holdenville
KERNEK, PAUL	Holdenville
KERNEK, CLYDE	Holdenville
Lett, Luus M.	Dustin
Martin C. C. (R)	Calvin
MAYFIELD, IMOGENE B.	Holdenville
MORRIS, CHARLES HENRY	Wetumka
PRYOR, V. W.	Holdenville
SCHAFF, HARTZELL V.	Holdenville
SLAGLE, GENE W.	Holdenville
WALLACE, C. S.	Holdenville

JACKSON COUNTY

ABERNATHY, E. A.	Altus
ABERNATHY, J. H.	Altus
ALLGOOD, EDWARD A.	Snyder
(Member Kiowa-Washita County Medical Society)	
ALLGOOD, E. J.	Altus
ALLGOOD, J. M.	Altus
BECKER, FRED W.	Altus
BERRY, THOMAS M.	Eldorado
BUSSEY, H. N.	Altus
CROW, E. S.	Olustee
ENSEY, JAMES E.	Altus
FOX, RAYMOND H.	Altus
HOLT, WILLARD D.	Altus
IRBY, J. P.	Altus
McCONNELL, L. H.	Altus
MABRY, E. W.	Altus
MOLLISON, MALCOLM	Altus
STARKEY, WAYNE A.	Altus
STULTS, J. S. (H)	Altus
TAYLOR, R. Z.	Blair
TEFERTILLER, C. L.	Altus
WOOLDRIDGE, BART F.	Altus

JEFFERSON COUNTY

ANDRESKOWSKI, W. T.	Ryan
BATES, FLOYD E.	Ringling
(Member Carter County Medical Society)	
HAGG, O. J.	Waurika
JACOB, JOHN B.	Waurika
KOURI, PHILLIP	Ryan
Kouri, Paul	Ryan
MAUPIN, C. M. (L)	Waurika
ROSIER, H. A.	Waurika
Yeats, Hugh W.	Ringling

JOHNSON COUNTY

Haberly, S. S.	Wapanucka
Rogers, William J.	Connerville
SCOTT, GEORGE WARREN	Tishomingo
(Member Pontotoc-Murray County Medical Society)	

KAY COUNTY

ARMSTRONG, W. O.	Ponca City
ARRENDELL, C. W.	Ponca City
ARRENDELL, CAD W., JR.	Ponca City
ARRENDELL, EUGENE	Ponca City
BEATTY, J. H.	Tonkawa
BECKER, L. H.	Blackwell
BUSH, J. M.	Ponca City
CLIFT, MERL	Blackwell
COOPER, N. H.	Ponca City
Dillman, Theodore E.	Ponca City
GARDNER, C. C.	Ponca City
GHORMLEY, J. G.	Blackwell
GIBSON, R. B.	Ponca City
Gibson, Robert W.	Ponca City
GILBERT, JOHN B.	Ponca City
GLASSCOCK, THOMAS C.	Ponca City
GORDON, D. M.	Ponca City
GOWEY, H. O.	Newkirk
HOWE, J. H.	Ponca City
KINSINGER, R. R.	Blackwell
KREGER, G. S.	Tonkawa
KREGER, J. R.	Tonkawa
McELROY, THOMAS	Ponca City
MacKERCHER, P. A.	Ponca City
MALL, W. W.	Ponca City
MATHEWS, DEWEY L.	Tonkawa
MERRIFIELD, V. C.	Ponca City
Miller, Minnie Ethel Reid (R)	Blackwell
MOHLER, E. C.	Ponca City
MOORE, G. C.	Ponca City
NEAL, LAILE G.	Ponca City
NIEMANN, GEORGE H.	Ponca City
NORTHCUTT, C. E.	Ponca City
NUCKOLS, A. S.	Ponca City
POWELL, P. T.	Ponca City
PRATT, PERRY	Ponca City
RISSE, A. S.	Blackwell
Robinson, Thomas L.	Ponca City
TERRY, JACK T.	Ponca City
WAGGONER, E. E.	Tonkawa
WAGNER, J. C.	Ponca City
WALKER, I. D.	Tonkawa
WHITE, M. S.	Blackwell
Widney, John B.	Kaw
YEARY, E. C.	Ponca City
YEARY, G. H.	Newkirk

KINGFISHER COUNTY

Cavett, Ernest R.	Loyal
Dixon, Ambrose	Hennessey
HODGSON, C. M.	Kingfisher
LATTIMORE, FRANK C.	Kingfisher
Meredith, A. O.	Kingfisher
Pendleton, John W.	Kingfisher
STURGEON, H. VIOLET	Hennessey
TAYLOR, JOHN R.	Kingfisher
TOWNSEND, B. I.	Hennessey
TRZASKA, HENRY	Hennessey
Vincent, I. H.	Dover

KIOWA COUNTY

BERNELL, WILLIAM	Hobart
BRAUN, J. P.	Hobart
Britt, Henry A.	Snyder
FINCH, J. WILLIAM	Hobart
Gaines, John F.	Hobart
HATHAWAY, ALFRED H. (L)	Mountain View
Hightower, Harry G.	Hobart
Howell, Y. A.	Mountain View
MAHONE, M. WILSON	Hobart
Moore, J. H., Jr.	Hobart
PHELAN, RALPH S.	Hobart
SHRINER, RICHARD F., JR.	Hobart
TOLBERT, JACK B.	Mountain View
Walker, F. E.	Lone Wolf
Watkins, B. H.	Hobart

LATIMER COUNTY

BOOTH, G. R., SR.	Willburton
(Member LeFlore-Haskell County Medical Society)	
BOOTH, G. R., JR.	Willburton
(Member Pittsburg County Medical Society)	
Callahan, J. S.	Willburton
Hamilton, E. B.	Willburton
Henry, T. L.	Willburton

LEFLORE COUNTY

BAKER, FORREST P.	Talihina
BEVILL, S. P.	Poteau
BRADLEY, FRANK	Talihina
Burns, Charlie Sutton	Bokoshe
COLLINS, E. L.	Panama
COTTON, W. W.	Poteau
CUNNINGHAM, C. S.	Poteau
DEAN, S. C.	Howe
Dorrrough, Jonathan	Monroe
FAIR, E. N.	Heavener
GILLIAM, WILLIAM C.	Spiro
Hartshorne, W. O.	Spiro
HARVEY, JOHN H.	Heavener
HOGABOOM, G. M.	Heavener
Jones, Lawson D.	Talihina
LOWREY, ROBERT W.	Poteau
MINOR, R. W.	Spiro
Mixon, A. M.	Spiro
SAVIERS, BOYD M.	Poteau
WOODSON, EARL	Poteau
WRIGHT, RUSH L.	Poteau

LINCOLN COUNTY

BAILEY, CARL H.	Stroud
BAUGH, HAROLD T.	Meeker
BURLESON, NED II.	Prague
COLLINS, GLENN S., JR.	Lawton
DEMAS, ROSS P.	Stroud
ERWIN, PARA F.	Wellston
HURLBUT, E. F.	Meeker
Marshall, A. M.	Chandler
MILEHAM, JACK C.	Chandler
NICKELL, U. E.	Davenport
ROBERTSON, C. W.	Chandler

LOGAN COUNTY

BARKER, PAULINE	Guthrie
Conrad, H. W. (C)	Guthrie
FIFE, PHILLIPS R.	Guthrie
GRAY, DAN F. (L)	Guthrie
HAHN, L. A.	Guthrie
HILL, C. B. (L)	Guthrie
LARKIN, H. W. (L)	Guthrie
LEHEW, ELTON W.	Guthrie
LEHEW, JOHN L.	Guthrie
MERRELL, WEBBER	Guthrie
MILLER, WILLIAM C.	Guthrie
PETTY, C. S.	Guthrie
PETTY, JAMES S.	Guthrie
RINGROSE, R. F.	Guthrie
RITZHAUPT, LOUIS H.	Guthrie
SOUTER, J. E.	Guthrie
Spann, S. A. (C)	Meridian
Thompson, Stacy C. (C)	Guthrie
Trigg, F. E.	Guthrie

LOVE COUNTY

Gardner, Robert A.	Marietta
Gray, William J.	Marietta
LAWSON, PAT	Marietta
(Member Carter County Medical Society)	
LOONEY, McDONALD	Marietta
(Member Carter County Medical Society)	
MEANS, ROYCE B.	Marietta
(Member Carter County Medical Society)	

McCLAIN COUNTY

COCHRANE, J. E.	Byars
Johnson, M. R.	Purecell
KOLB, I. N.	Blanchard
McCURDY, WILLIAM C., SR.	Purecell
McCURDY, WILLIAM C., JR.	Purecell
OBERT, PAUL M.	Purecell
ROYSTER, RALPH	Purecell

McCURTAIN COUNTY

Clarkson, A. W. (R)	Valliant
Clarkson, A. M.	Valliant
GEE, L. E.	Broken Bow
Hamilton, J. G. (R)	Bethel
HEAD, ROBERT W.	Idabel
Hooper, E. C.	Idabel
Howard, Thomas	Idabel
KELLEAM, E. A. (L)	Wright City
McBRAYER, WILLIAM H. (L)	Idabel
McCaskill, William B.	Idabel
MORELAND, J. T.	Idabel
MORELAND, W. A.	Idabel
Oliver, Robert B.	Idabel
Pollard, T. H.	Haworth
RHEA, THOMAS E.	Idabel
SHERRILL, R. H.	Broken Bow
Werner, D. F.	Broken Bow
WILLIAMS, R. D.	Idabel
WILLIAMS, W. W.	Idabel

McINTOSH COUNTY

Baker, J. Howard, Sr.	Eufaula
BAKER, J. HOWARD, JR.	Eufaula
FIRST, FRANCIS R., SR.	Checotah
FIRST, FRANCIS R., JR.	Checotah
JACOBS, LUSTER I.	Idanna
Snelson, Andrew J.	Checotah
TOLLESON, W. A. (H)	Eufaula
WENDEL, WILLIAM E.	Eufaula
WOOD, JAMES L.	Eufaula

MAJOR COUNTY

Johnson, B. F. (R)	Fairview
McCROSKIE, M. R.	Fairview
(Member Garfield-Kingfisher County Medical Society)	
SMITH, DONALD H.	Fairview
(Member Garfield-Kingfisher County Medical Society)	
Scott, George Elmer	Ringwood

MARSHALL COUNTY

COOK, ODIS A.	Madill
(Member Carter County Medical Society)	
Hulen, Charles R.	Kingston
RAFF, JOSEPH S.	Madill
(Member Carter County Medical Society)	
Rowland, C. W. (R)	Willis
YORK, J. F.	Madill
(Member Carter County Medical Society)	

MAYES COUNTY

Bryant, William Cullen	Choteau
CAMERON, PAUL B.	Pryor
MORROW, B. L.	Salina
Rutherford, S. C.	Locust Grove
STANLEY, MONTE V.	Pryor
WERLING, E. H.	Pryor

MURRAY COUNTY

ANNADOWN, PAUL V.	Sulphur
Ball, Ernest	Sulphur
Brown, Byron B.	Davis
Clark, Guy (R)	Sulphur
CRANDALL, WILL G.	State Vet. Hospital, Sulphur
Davis, E. F. (R)	Sulphur
DeLAY, W. D.	Sulphur
Mathew, William F.	Sulphur
MORTON, R. W.	Sulphur
Opstedal, J. A.	State Vet. Hospital, Sulphur
Rudell, William P.	Davis
STIBAL, JERROLD F.	Sulphur
WRENN, J. A.	Sulphur

MUSKOGEE COUNTY

ALDREDGE, WILLIAM M.	Veterans Hospital, Muskogee
BALLANTINE, H. T.	Surety Bldg., Muskogee
BEATY, CHARLES SAMUEL	1622 Houston, Muskogee
Berry, W. D.	Barnes Bldg., Muskogee
BLAKEMORE, JESSE L. (L)	Commercial National Bldg., Muskogee
BRUTON, L. D.	Commercial National Bldg., Muskogee
Chambers, Albert M.	Veterans Hospital, Muskogee
Chandler, Jesse S. (C)	111½ S. 2, Muskogee
COACHMAN, E. H.	Manhattan Bldg., Muskogee
CRAMBLET, D. H.	V. A. Regional Office, Muskogee
Davis, Emmer P.	Veterans Administration, Muskogee
Donnell, Robert N. (R)	218 W. Bdwy., Muskogee
DORWART, F. G.	510 S. 11, Muskogee
DOYLE, WILLIAM H.	Commercial National Bldg., Muskogee

Dwight, Kennie M. (R)	808 N. "C" St., Muskogee
EARNEST, A. N.	Barnes Bldg., Muskogee
ELKINS, MARVIN	Barnes Bldg., Muskogee
EWING, FINIS W.	119 N. 3, Muskogee
FITE, E. HALSELL	Commercial National Bldg., Muskogee
FITE, W. P.	Commercial National Bldg., Muskogee
Ford, C. E. (C)	Taft
Gayman, B. R.	Veterans Hospital, Muskogee
GRAY, V. B.	Surety Bldg., Muskogee
Green, James Lanis, Jr.	540 Baltimore, Muskogee
HACKLER, JOHN F.	City-County Health Dept., Muskogee
HAMM, SILAS G.	Haskell
Hartshorne, George E.	Milner Hotel, Muskogee
Henry, E. P. (C)	Taft
HENRY, EUGENE M.	Commercial National Bldg., Muskogee

HEWITT, PERRY E.	Manhattan Bldg., Muskogee
HOLCOMBE, R. N.	Surety Bldg., Muskogee
HOOPER, J. S. (H)	Veterans Hospital, Muskogee
HORN, JOHN E.	1620 W. Okmulgee, Muskogee
JOHNSON, PORT	Surety Bldg., Muskogee
JOHNSON, S. E.	Commercial National Bldg., Muskogee
KAISER, G. L.	1221 W. Bdwy., Muskogee
KLASS, O. C.	Surety Bldg., Muskogee
KUPKA, JOHN F.	Haskell
LIPNICK, LOUIS	V. A. Regional Office, Muskogee
McALISTER, L. S.	Barnes Bldg., Muskogee
McPhaul, Thomas C. (C)	222½ N. 2, Muskogee
MATTHEWS, VIRGIL D.	Surety Bldg., Muskogee
MILLER, D. EVELYN	Honor Heights Drive, Muskogee
Montgomery, William W. (C)	114½ Court St., Muskogee
Muckleroy, Henry L. (C)	228½ N. 2, Muskogee
NEELY, SILLADE D.	Commercial National Bldg., Muskogee

OGLESBEE, C. L.	Manhattan Bldg., Muskogee
OLDHAM, I. BROWN	426 N. 6, Muskogee
Penny, Ollie Horace (C)	Boynton
PRATT, T. WILLARD	V. A. Hospital, Muskogee
RAFTER, JOHN RALPH	Manhattan Bldg., Muskogee
REYNOLDS, JACK HAYNES	Barnes Bldg., Muskogee

REYNOLDS, JOHNFirst National Bank Bldg.,
 Muskogee
 Ritan, AndrewVeterans Hospital, Muskogee
 ROGERS, I. W.519 S. 3, Muskogee
 SANDERS, H. U.St. Louis, Missouri
 SCOTT, H. A.Commercial National Bldg., Muskogee
 STARK, WALTER W.V. A. Regional Office,
 Muskogee

(Member of Okmulgee County Medical Society)

STEELMAN, GERALD MATTHEWHaskell
 Thomas, L. M.Webbers Falls
 THOMPSON, M. K.Surety Bldg., Muskogee
 Tracy, Gilbert W.Veterans Hospital, Muskogee
 TURNER, R. D.Barnes Bldg., Muskogee
 VARIAN, THELMA S.Honor Heights Drive,
 Muskogee
 Wallis, Grover ClevelandFt. Gibson
 WARTERFIELD, F. E. (H)Muskogee
 WEAVER, WILLIAM NIEBUHR204 N. 3,
 Muskogee

WHITE, CHARLES ED562 N. 6, Muskogee
 WHITE, J. HUTCHINGSSurety Bldg., Muskogee
 WOLFE, I. C.426 N. 6, Muskogee
 WOOD, WILLIAM M.Barnes Bldg., Muskogee
 WOODBURN, JOEL T.Barnes Bldg., Muskogee

NOBLE COUNTY

Brengle, Daniel D.Perry
 Coldiron, D. F.Perry
 COOKE, CHARLES H.Perry
 Dougherty, R. J., Jr.Perry
 DRIVER, GEORGE L.Billings
 DRIVER, J. W.Perry
 EVANS, A. M.Perry
 FRANCIS, J. W.Perry
 RENFROW, T. F. (H)Billings
 SIMON, BILL J.Perry

NOWATA COUNTY

ADAMS, FELIXNowata
 GRIGSBY, O. L.Nowata
 KURTZ, R. L.Nowata
 LANG, S. A.Nowata
 ROBERTS, S. P. (L)Nowata
 SCOTT, M. B.Delaware

OKFUSKEE COUNTY

Buruley, Frederick F. (C)Boley
 COCHRAN, C. M.Okemah
 JENKINS, W. P.Okemah
 LUCAS, A. C. (H)Castle
 Lucas, John Henry Clay (C)Clearview
 MELTON, A. S.Okemah
 Nye, L. A.Okemah
 ROSE, DAYTON M.Okemah
 Sanders, H. M. (C)Boley
 SPICKARD, L. J.Okemah
 Tabor, George E. (R)Weleetka
 WHITNEY, M. L.Okemah

OKLAHOMA COUNTY

ABSHIER, A. BROOKS1200 N. Walker, Okla. City
 ADAMS, ROBERT H.515 N. W. 11, Okla. City
 AKIN, ROBERT H.610 N. W. 9, Okla. City
 ALFORD, J. M.Medical Arts, Okla. City
 Alder, Walter H.109 N. E. 3rd., Okla. City
 ALLEN, GEORGE T.1200 N. Walker, Okla. City
 AMSPACHER, JAMES C.525 N. W. 11, Okla. City
 ANDERSON, HUBERT M.525 N. W. 11, Okla. City
 ANDREWS, LEILA E.509 N. W. 15, Okla. City
 ANNADOWN, RUTH VIVIANO. U. Medical School,
 Okla. City

ANSPAUGH, ROBERT D.1200 N. Walker, Okla. City
 APPLETON, MEREDITH M.610 N. W. 9th,
 Okla. City

ARCHER, HOMER V.1200 N. Walker, Okla. City
 ATKINS, W. H. (J)O. U. Medical School,
 Okla. City

AVEY, H. T.416 N. W. 13, Okla. City
 Bailey, Frank M.1219 N. W. 21, Okla. City
 BAIRD, W. D. (L)203 Colcord Bldg., Okla. City
 BAKER, MARGUERITE M.1200 N. E. 63,
 Okla. City

BALYEAT, RAY M.1200 N. Walker, Okla. City
 Barb, Thomas J.V. A. Regional Office, Okla. City
 Barclay, Carl A. (C)1624 N. E. Grand Blvd.,
 Okla. City

BARKETT, N. F. VANDERMedical Arts, Okla. City
 BARNES, HARRY E.905 S. W. 29, Okla. City
 BARRY, GEORGE N.525 N. W. 11, Okla. City

BATCHELOR, JOHN J.Medical Arts, Okla. City

Bates, C. W.2528½ S. Robinson, Okla. City

BATES, C. E.V. A. Hospital, Okla. City

BAUM, E. ELDON2544 N. W. 30, Okla. City

BAYLOR, R. A.400 N. W. 10, Okla. City

BAYLEY, ROBERT H.O. U. Medical School,
 Okla. City

Baynham, Charles W.Rt. 9, Box 170, Okla. City

BEDNAR, GERALDMedical Arts, Okla. City

BELL, AUSTIN H.301 N. W. 12, Okla. City

Bell, James ThomasEdmond

BELL, J. P.Post Office Bldg., Midwest City

Beller, CleveO. U. Medical School, Okla. City

BENNETT, HENRY G., JR.Medical Arts, Okla. City

BENNETT, HOWARD A.O. U. Medical School,
 Okla. City

BERRY, CHARLES NELSONMedical Arts,
 Okla. City

BEST, J. C.111 South Broadway, Okla. City

BIELSTEIN, C. M.301 N. W. 12, Okla. City

BINDER, HAROLD J.443½ N. W. 23, Okla. City

BINKLEY, J. G.Municipal Bldg., Okla. City

BLACHLY, LUCILLE SPIRE605 N. W. 10,
 Okla. City

BLUE, JOHNNY A.Hales Bldg., Okla. City

BOATRIGT, LLOYD C.Perrine Bldg., Okla. City

BODINE, CHARLES D.Plaza Court, Okla. City

BOGGS, NATHANPerrine Bldg., Okla. City

BOHAN, KENNETH EARL625½ N. W. 10,
 Okla. City

Bond, William L.717 N. W. 9, Okla. City

BONDURANT, C. P.Medical Arts, Okla. City

BONHAM, WILLIAM L.Medical Arts, Okla. City

Border, C. L.217 N. W. 13, Okla. City

BORECKY, GEORGE L.521 N. W. 11, Okla. City

BOYER, HAROLD L.Medical Arts, Okla. City

BOZALIS, GEORGE S.1200 N. Walker, Okla. City

BRADFORD, VANCE A.Medical Arts, Okla. City

BRADLEY, H. C.Perrine Bldg., Okla. City

BRANHAM, D. W.Medical Arts, Okla. City

BREWER, A. M.621 N. W. 10, Okla. City

Brooks, Edward B. (C)320 N. E. 2, Okla. City

BROWN, C. ALTONHome State Bldg., Okla. City

BROWN, D. NELLO510 N. W. 12, Okla. City

BROWN, GERSTER W.Medical Arts Bldg., Okla. City

BROWN, JOHN MARION515 N. W. 11, Okla. City

BUCHNER, HAROLD W.1323½ N. Robinson,
 Okla. City

BURKE, RICHARD M.Medical Arts, Okla. City

BURTON, JOHN F.434 N. W. 13, Okla. City

BUTLER, H. W.1200 N. Walker, Okla. City

BYNUM, TURNER510 N. W. 12, Okla. City

CAILEY, LEO F.Medical Arts, Okla. City

CAMPBELL, COYNE H.2920 Classen, Okla. City

CAMPBELL, J. MOOREMedical Arts, Okla. City

CANNON, J. M.210½ S. W. Commerce, Okla. City

CAPEHART, SAMUEL A.2920 Classen, Okla. City

(Member of Okfuskee County Medical Society)

CAPPS, J. F.Tinker Field, Okla. City

CARPENTER, RICHARD EVERETT413 N. W. 12,
 Okla. City

CARTER, H. GRAY525 N. W. 11, Okla. City

CASEY, ROBERT E. (J)601 N. W. 9, Okla. City

CASPER, PETE D.2913 Epperly Drive, Del. City

CATES, ALBERT M. (R) (H)2733 N. W. 20,
 Okla. City

CAVINESS, J. J.Medical Arts, Okla. City

CHARNEY, L. H.Medical Arts, Okla. City

CLARK, ANSON L.400 N. W. 13, Okla. City

CLARK, JOHN V.301 S. W. 23, Okla. City

- CLARK, LeMON400 N. W. 13, Okla. City
 CLARK, RALPH O.301 S. W. 23, Okla. City
 CLAY, R. A.416 N. W. 13, Okla. City
 Clements, Donald G.900 N. W. 17, Okla. City
 CLYMER, CYRIL E.Medical Arts, Okla. City
 COIL, JENNER G.Medical Arts, Okla. City
 COLEY, ANDREW JACKSON (R) (H)
 1929 N. W. Park, Okla. City
 COLEY, JOE H.416 N. W. 13, Okla. City
 COLLINS, JOE ED905 S. W. 29, Okla. City
 (Member of Cleveland County Medical Society)
 COLLINS, MABELLE S.905 S. W. 29, Okla. City
 (Member of Cleveland County Medical Society)
 COLVERT, J. R.400 N. W. 10, Okla. City
 COOK, C. E., JR.Britton
 (Member of Alfalfa County Medical Society)
 COOPER, F. MAXEYMedical Arts, Okla. City
 COSTON, TULLOS O.Medical Arts, Okla. City
 COTTON, DAISY1111 N. Dewey, Okla. City
 Cox, J. A., Jr. (C)429½ N. E. 4, Okla. City
 Cox, J. A., Sr. (C)429½ N. E. 4, Okla. City
 COYNER, WALLACE R.Edmond
 CRAWFORD, PAUL H.441 N. W. 12, Okla. City
 CRAWFORD, STERLING T.525 N. W. 11,
 Okla. City
 CRICK, L. E.Britton
 Cronk, Robert ThomasV. A. Hospital, Okla. City
 CUNNINGHAM, JOHN A.First National Bldg.,
 Okla. City
 CUNNINGHAM, P. J.Medical Arts, Okla. City
 CUSHING, VERNON D.1200 N. Walker, Okla. City
 Dailey, C. E.Coleord Bldg., Okla. City
 Daniel, John FurmanMedical Arts, Okla. City
 DANIELS, HARRY A.610 N. W. 9, Okla. City
 DANSTROM, JOHN R.Medical Arts, Okla. City
 Davis, A. I. (C)316½ N. E. 2, Okla. City
 DAWSON, C. B.610 N. W. 9, Okla. City
 DeGaris, Charles FrancisO. U. Medical School,
 Okla. City
 DePorte, S.First National Bldg., Okla. City
 DERSCH, WALTER H.Medical Arts, Okla. City
 DERSCH, WALTER HARRY, JR. (J)
 O. U. Medical School, Okla. City
 DEUPREE, HARRY L.525 N. W. 11, Okla. City
 Dickson, Green K. (R)2124 Carey Place, Okla. City
 DILL, FRANCIS E.Medical Arts, Okla. City
 DIXON, R. W.328 Aerona Drive, Midwest City
 DODSON, HARRELL C., JR.O. U. Medical School,
 Okla. City
 DONNELL, JOHN J.525 N. W. 11, Okla. City
 DOUDNA, H. E.Medical Arts, Okla. City
 DOUGHERTY, VIRGIL F.901 N. W. 23, Okla. City
 DOWDY, T. W.Medical Arts, Okla. City
 DUNN, J. HARTWELL416 N. W. 13, Okla. City
 EASTLAND, WILLIAM E.Medical Arts, Okla. City
 EDWARDS, MARTIN DALE4420 S. E. 28,
 Okla. City
 EDWARDS, RHEBA L.4420 S. E. 28, Okla. City
 ELEY, N. PRICE400 N. W. 10, Okla. City
 ELLIS, L. J.4104 N. MacArthur Blvd., Okla. City
 EMENHISER, LEE K.511 N. W. 11, Okla. City
 EPLEY, C. O.1200 N. Walker, Okla. City
 ESKRIDGE, JAMES B., JR.1200 N. Walker,
 Okla. City
 FAGIN, HERMAN521 N. W. 11, Okla. City
 FAIR, EDWINMedical Arts, Okla. City
 FARIS, BRUNEL D.Medical Arts, Okla. City
 FARR, LOUISE K.322 N. E. 11, Okla. City
 FARRIS, EDWARD M.Medical Arts, Okla. City
 FERGUSON, E. GORDONMedical Arts, Okla. City
 Field, C. H.1517 N. W. 28, Okla. City
 Finley, G. E. (C)324½ N. E. 2, Okla. City
 FISHMAN, C. J.132 N. W. 4, Okla. City
 FLEETWOOD, DOYLE H.Edmond
 FLESHIER, T. H.Edmond
 FLORENCE, JOHN (A)400 N. W. 13, Okla. City
 FLUHR, WILLIAM F. (J)Van Nuys, California
 FOERSTER, HERVEY A.Medical Arts, Okla. City
 FRANK, LOUIS S.1200 N. Walker, Okla. City
 FREEDE, HENRY J.420 N. W. 13, Okla. City
 FREEMAN, CHARLES W.625½ N. W. 10,
 Okla. City
 FREW, A. L., JR.528 N. W. 12, Okla. City
 FRIERSON, S. E.Medical Arts, Okla. City
 FRYER, SAMUEL R.511 N. W. 11, Okla. City
 Fuller, Tilman (R)2300 South Central, Okla. City
 FULTON, CLIFFORD C.Medical Arts, Okla. City
 FULTON, GEORGEAmerican National Bldg.,
 Okla. City
 GABLE, JAMES, JR.301 N. W. 12, Okla. City
 GALBRAITH, HUGH M.First National Bldg.,
 Okla. City
 GALLAGHER, CLARENCE ALFRED610 N. W. 9,
 Okla. City
 GARRISON, GEORGE H.1200 N. Walker, Okla. City
 Garst, Ronald JosephV. A. Hospital, Okla. City
 GEE, O. J.Medical Arts, Okla. City
 GIBBS, ALLEN G.521 N. W. 11, Okla. City
 GLASGOW, JACK G.4101 N. MacArthur Blvd.,
 GLISMANN, M. B.1019 N. Lee, Okla. City
 GLOMSET, JOHN L.2420 Classen, Okla. City
 GOLDFAIN, E.228 N. W. 13, Okla. City
 GOODHUE, W. W.(U. S. Navy) Hawaii
 GOODWIN, R. Q.Medical Arts, Okla. City
 Gow, Elizabeth D. (Out of Practice)
 2105 N. McKinley, Okla. City
 GRAENING, P. K.Medical Arts, Okla. City
 GRAHAM, ALLISON T.26 S. W. 25, Okla. City
 Gray, Ethel Lovier Boren1117 N. Shartel, Okla. City
 GRAY, FLOYD1200 N. Walker, Okla. City
 GUTHREY, G. H.510 N. W. 12, Okla. City
 Guthrie, A. L.2528 S. Robinson, Okla. City
 HALL, CLARK H.Medical Arts, Okla. City
 HARBISON, FRANK436 N. W. 12, Okla. City
 HARBISON, J. E. (L)436 N. W. 12, Okla. City
 Harper, C. W.Bethany
 HARRIS, CLYDE E.2419 N. Walker, Okla. City
 HARRIS, HENRY W.1200 N. Walker, Okla. City
 HARRIS, RICHARD L.1200 N. Walker, Okla. City
 HARRIS, RUSSELL DAVID605 N. W. 10,
 Okla. City
 HARRISON, LYNN H.2805 N. W. 23, Okla. City
 HARRISON, STEARLEY P.Medical Arts, Okla. City
 HARTFORD, WALTER K.Medical Arts, Okla. City
 HASKETT, PAUL E.Hales Bldg., Okla. City
 HASSLER, F. R.State Health Department, Okla. City
 HASSLER, GRACE CLAUSEMedical Arts, Okla. City
 HAYES, BASIL A.625 N. W. 10, Okla. City
 Hays, Carolyn C. AdamsCounty Health Department,
 Okla. City
 Haywood, W. L. (C)307½ N. E. 2, Okla. City
 HAZEL, ONIS GEORGEMedical Arts, Okla. City
 HEATLEY, JOHN E.Medical Arts, Okla. City
 HENDREN, SCOTT216½ S. W. 25, Okla. City
 HERRMANN, JESS D.521 N. W. 11, Okla. City
 Hetherington, Albert Jackson2014 Gatewood Ave.,
 Okla. City
 HICKS, FRED B.Medical Arts, Okla. City
 HIRSHFIELD, A. C.Medical Arts, Okla. City
 HOLLIS, LYNN ESTILLTinker Field, Okla. City
 HOLT, ROBERT P.301 N. W. 12, Okla. City
 HOOD, F. REDDING1200 N. Walker, Okla. City
 Hopps, Howard C.O. U. Medical School, Okla. City
 HOUGH, JACK V.301 N. W. 12, Okla. City
 HOWARD, ROBERT B.1200 N. Walker, Okla. City
 HOWARD, ROBERT M. (L)1200 N. Walker,
 Okla. City
 Hubbard, John C.1501 N. E. 11, Okla. City
 HUBBARD, JOHN R.1501 N. E. 11, Okla. City
 HUBBARD, RALPH W.1501 N. E. 11, Okla. City
 HUBBARD, WILLIAM E.1501 N. E. 11, Okla. City
 Huddle, W. I.Local Bldg., Okla. City
 HUFF, DICK H.1200 N. Walker, Okla. City
 Huffman, L. H.Britton
 HUGGINS, J. R.Medical Arts, Okla. City
 INGLE, JOHN D.1200 N. Walker, Okla. City

ISHMAEL, WILLIAM K.	605 N. W. 10, Okla. City
JACKSON, ALVIN R.	2519½ S. Robinson, Okla. City
JACOBS, MINARD F.	Medical Arts, Okla. City
JETER, HUGH	1200 N. Walker, Okla. City
JOBE, VIRGIL R.	1213 N. Hudson, Okla. City
JOHNSON, R. RAY	Britton
Johnston, Thomas Edward	V. A. Regional Office, Okla. City
JONES, HUGH	Medical Arts, Okla. City
JONES, PHYLISS E.	Medical Arts, Okla. City
JONES, RALPH E.	Nicoma Park, Okla. City
KAHN, ROBERT W.	Medical Arts, Okla. City
KELLER, W. FLOYD	Medical Arts, Okla. City
Kelly, John F.	Medical Arts, Okla. City
KELSO, JOSEPH W.	525 N. W. 11, Okla. City
KELTZ, BERT F.	Medical Arts, Okla. City
KENNEDY, J. J.	Edmond
KERNODLE, STRATTON E.	First National Bldg., Okla. City
KIMBALL, GEORGE H.	Medical Arts, Okla. City
King, William May (R)	319 N. W. 7, Okla. City
KUHN, JOHN F.	Medical Arts, Okla. City
LACHMAN, ERNEST	O. U. Medical School, Okla. City
LAIN, EVERETT S.	Medical Arts, Okla. City
LAMB, JOHN H.	Medical Arts, Okla. City
LAMBKE, PHIL M.	105 N. W. 23, Okla. City
LaMOTTE, GEORGE A.	Colcord Bldg., Okla. City
LANGSTON, WANN	525 N. W. 11, Okla. City
LAWSON, ROBERT C.	301 N. W. 12, Okla. City
Lee, Clarence E.	Hightower Bldg., Okla. City
LEMON, CECIL W.	Medical Arts, Okla. City
LENEY, FANNIE LOU	525 N. W. 11, Okla. City
LEONARD, CHARLES EDWARD	525 N. W. 11, Okla. City
LESTER, E. F.	515 N. W. 11, Okla. City
LEVY, BERTHA M.	1200 N. Walker, Okla. City
LINGENFELTER, FORREST M.	1200 N. Walker, Okla. City
LISLE, A. C., JR.	1200 N. Walker, Okla. City
LITTLE, JOHN R.	3626 N. Western, Okla. City
Loeser, William	2800 N. W. 22, Okla. City
LONG, LeROY D.	Medical Arts, Okla. City
LOUGHMILLER, ROBERT F.	Medical Arts, Okla. City
LOVE, ROBERT S. (L)	2701 N. W. 19, Okla. City
LOWE, ROBERT CHESTER	O. U. Medical School, Okla. City
LOY, C. F.	400 N. W. 10, Okla. City
LOY, ROBERT L., JR.	807 N. W. 23, Okla. City
LUTON, JAMES P.	Medical Arts, Okla. City
LYON, J. I. (H)	Edmond
LYSAUGHT, J. NEILL	301 N. W. 12, Okla. City
McBRIDE, EARL D.	605 N. W. 10, Okla. City
McCLURE, C. W.	Medical Arts, Okla. City
McCLURE, WILLIAM C.	1200 N. Walker, Okla. City
McCOLLUM, W. T.	415 N. W. 12, Okla. City
McCREIGHT, WILLIAM GEORGE	525 N. W. 11, Okla. City
McDANIEL, SAMUEL J.	25 S. W. 25, Okla. City
McGEE, J. P.	1200 N. Walker, Okla. City
McHENRY, L. CHESTER	Medical Arts, Okla. City
McINNIS, DALTON B.	2912 S. Walker, Okla. City
McINNIS, J. THERMON	2912 S. Walker, Okla. City
McKEE, ROBERT D.	522 N. W. 13, Okla. City
McKINNEY, MILAM F.	Medical Arts, Okla. City
McLAUGHLIN, J. R., JR.	521 N. W. 11, Okla. City
McNEILL, P. M.	Medical Arts, Okla. City
McPherson, W. G.	2504 S. Agnew, Okla. City
MACRORY, PAUL D.	Bethany
MACDONALD, J. C.	301 N. W. 12, Okla. City
MACKEY, ABNER (J)	605 N. W. 10, Okla. City
MARGO, ELIAS	605 N. W. 10, Okla. City
MARIL, JOSEPH J.	Medical Arts, Okla. City
MARIL, W. D.	807 N. W. 23, Okla. City
Martin, Howard Choice	V. A. Regional Office, Okla. City
MARTIN, J. T. (L)	200 N. W. 14, Okla. City
MASTERSON, MAUDE M.	1200 N. Walker, Okla. City
MATHEWS, GRADY F.	State Health Department, Okla. City
MATTHEWS, SANFORD	400 N. W. 10, Okla. City
Mayo, Bessie	30th and Council Road, Okla. City
MECHLING, GEORGE S.	1200 N. Walker, Okla. City
MESSENBAUGH, J. F.	Medical Arts, Okla. City
MESSINGER, R. P.	807 N. W. 23, Okla. City
MILES, W. H.	Municipal Bldg., Okla. City
MILLER, NESBITT L.	Medical Arts, Okla. City
Miller, William Arthur	520 N. W. 19, Okla. City
MILLS, R. C.	Hightower Bldg., Okla. City
Moon, E. C. (C)	1732½ N. E. 7, Okla. City
Moor, Hiram Dunlap	O. U. Medical School, Okla. City
MOORE, B. H.	Perrine Bldg., Okla. City
MOORE, C. D.	Perrine Bldg., Okla. City
Moore, Dan Miller (C)	522½ E. 3, Okla. City
MOORE, ELLIS	Medical Arts, Okla. City
Moore, Maurice B. (C)	626 N. E. 4, Okla. City
MOORE, SAMUEL T.	515½ N. W. 11th, Okla. City
MOORMAN, FLOYD	1200 N. Walker, Okla. City
MOORMAN, LEWIS J.	1200 N. Walker, Okla. City
Morgan, C. Wesley (C)	600½ N. E. 4, Okla. City
MORGAN, C. A.	Home State Life Bldg., Okla. City
MORGAN, ROBERT J.	Medical Arts, Okla. City
Morgan, Vance F.	Harrah
MORLEDGE, WALKER	1200 N. Walker, Okla. City
MORRISON, H. C.	807 N. W. 23, Okla. City
MORRISON, J. W.	1200 N. Walker, Okla. City
MOTH, M. V. (R)	2001 N. Lottie, Okla. City
Muchmore, Harold Gordon	O. U. Medical School, Okla. City
MULVEY, BERT E.	1200 N. Walker, Okla. City
MURDOCH, RAYMOND L.	Medical Arts, Okla. City
Murdoch, Lester Hughes (R)	1101 S. MacArthur Blvd., Okla. City
MUSICK, ELMER R.	Medical Arts, Okla. City
MUSICK, VERN H.	Medical Arts, Okla. City
MUSSIL, W. M.	Medical Arts, Okla. City
NAGLE, PATRICK S.	1021 N. Lee, Okla. City
NEEL, ROY LAWRENCE	V. A. Regional Office, Okla. City
NEFF, EVERETT B.	1200 N. Walker, Okla. City
Nelson, J. D. (C)	331 N. E. 2, Okla. City
NICHOLSON, BEN H.	301 N. W. 12, Okla. City
NOELL, R. L.	Medical Arts, Okla. City
NORRICK, JOHN (R) (H)	106 N. W. 25, Okla. City
Norvell, E. E.	222½ W. Commerce, Okla. City
OBERMANN, CHARLES F.	Capitol Bldg., Okla. City
O'DONOGHUE, DON H.	Medical Arts, Okla. City
O'LEARY, CHARLES M.	Medical Arts, Okla. City
Oppen, Marshall	3722 Indiana Place, Okla. City
OWENS, J. N., JR.	605 N. W. 10, Okla. City
PARKER, JOE M.	Medical Arts, Okla. City
PARRISH, J. M., JR.	522 N. W. 13, Okla. City
PATZER, REYNOLD	217 N. W. 13, Okla. City
PAULUS, D. D.	301 N. W. 12, Okla. City
PAYNE, RALPH E.	Edmond
Payne, Richard Weston	Route #10, Box #455, Okla. City
PAYTE, J. I.	2429 Aurora Court, Okla. City
PENICK, GRIDER	Colcord Bldg., Okla. City
Phelan, J. R. (R)	1618 N. Bdwy., Okla. City
PHILLIPS, JAMES G.	625 N. W. 10, Okla. City
PHIPPS, JOHN	V. A. Regional Office, Okla. City
PINE, JOHN S.	Medical Arts, Okla. City
Points, Blair	V. A. Regional Office, Okla. City
POINTS, THOMAS C.	609 N. W. 10, Okla. City
POLLOCK, I. O.	2111 N. Everest, Okla. City
POOLE, WARREN	2025 N. W. 12, Okla. City
POSTELLE, J. M. (H)	611 W. Mulberry, San Antonio, Texas

- PRATT, C. M.1449 Westwood Ave., Okla. City
 POUNDERS, CARROLL M.1200 N. Walker, Okla. City
 PRICE, JOEL S.1200 N. Walker, Okla. City
 PROSSER, MOORMAN P.Medical Arts, Okla. City
 PUCKETT, CARL22 N. W. 6, Okla. City
 (Member of Rogers-Mayes County Medical Society)
 Putnam, Claude Eugene2204 S. W. 13, Okla. City
 Juenser, Fred AugustV. A. Hospital, Okla. City
 RECK, JOHN ARTHUR (R) Colcord Bldg., Okla. City
 RECORDS, JOHN W.301 N. W. 12, Okla. City
 Redmond, Robert F.O. U. Medical School, Okla. City
 REED, HORACE1200 N. Walker, Okla. City
 REED, JAMES R.Medical Arts, Okla. City
 REEVES, CLAUDE L.400 N. W. 10, Okla. City
 REICHMANN, RUTH K.124 N. W. 15, Okla. City
 REIFF, WILLIAM H.400 N. W. 13, Okla. City
 RICE, P. B.216½ W. Commerce, Okla. City
 RICKS, JAMES R.Medical Arts, Okla. City
 RIDGEWAY, ELMER, JR.2750 N. W. 23, Okla. City
 RIELY, LEA A.Medical Arts, Okla. City
 Riley, John W.N. E. 36, Okla. City
 RIX, ALVIN521 N. W. 11, Okla. City
 ROBERTSON, EDWIN NORRIS, JR.301 N. W. 12, Okla. City
 Robinson, Charles W.V. A. Regional Office, Okla. City
 ROBINSON, J. H.301 N. W. 12, Okla. City
 RODDY, JOHN A.Apeo Tower Bldg., Okla. City
 ROGERS, GERALD1200 N. Walker, Okla. City
 ROSS, SAMUEL PRICE (R) (H)1410 Camden Way, Okla. City
 ROUNTREE, C. R.525 N. W. 11, Okla. City
 ROYER, CHARLES A.525 N. W. 11, Okla. City
 RUCKS, W. W. (L)301 N. W. 12, Okla. City
 RUCKS, W. W., JR.301 N. W. 12, Okla. City
 RUHL, N. E.1438 N. E. 23, Okla. City
 RUSSO, PETER E.1200 N. Walker, Okla. City
 RUTHERFORD, V. M.328 Aeronca Drive, Midwest City
 Rutledge, Bob J.U. S. Naval Recruiting Office, Okla. City
 SADLER, LeROY H.1200 N. Walker, Okla. City
 SALOMON, A. L.1200 N. Walker, Okla. City
 SANGER, FENTON A.921 N. W. 23, Okla. City
 SANGER, F. M.921 N. W. 23, Okla. City
 SANGER, WELBORN W.Medical Arts, Okla. City
 SANGER, WINNIE M.921 N. W. 23, Okla. City
 SAPPER, H. V. L.525 N. W. 11, Okla. City
 SEBA, CHESTER R.1204 N. Hudson, Okla. City
 SEBRING, MILTON H.2515 Classen Blvd., Okla. City
 SERWER, MILTON J.1200 N. Walker, Okla. City
 SHACKELFORD, JOHNState Health Department, Okla. City
 SHAFFER, JEROME D.1200 N. Walker, Okla. City
 Shannon, J. B.206 N. E. 6, Okla. City
 SHAVER, S. R.413 N. W. 12, Okla. City
 Sheets, Fred C. (C)2810 N. Walker, Okla. City
 SHELBY, HUDSON S.Hales Bldg., Okla. City
 SHEPPARD, MARY V. S.Medical Arts, Okla. City
 SHIRCLIFF, E. E.128 N. W. 13, Okla. City
 SHOFSTALL, JEANNE ELISE1019 N. Lee, Okla. City
 SHORBE, HOWARD B.605 N. W. 10, Okla. City
 Short, Willis Leland2241 N. E. 22, Okla. City
 SIMS, HARRY JAMESV. A. Hospital, Okla. City
 Slaughter, W. H. (C)331½ N. E. 2, Okla. City
 SLEDGE, CLAIRE BLOUNT 807 N. W. 23, Okla. City
 SLEEPER, HAROLD GEORGE2920 Classen, Okla. City
 SMITH, CHARLES A.1617 Classen, Okla. City
 SMITH, DELBERT G. First National Bldg., Okla. City
 SMITH, EDWARD N.400 N. W. 10, Okla. City
 SMITH, L. L.229 S. W. 29, Okla. City
 SMITH, NEWTON CONVERSE1950 N. E. 23, Okla. City
 SMITH, RALPH A.Medical Arts, Okla. City
 SNOW, JAMES B.625½ N. W. 10, Okla. City
 SNYDER, JAMES H.421 N. E. 13, Okla. City
 SOWELL, H. K.1200 N. Walker, Okla. City
 STACY, J. R.605 N. W. 10, Okla. City
 STANBRO, GREGORY E.Medical Arts, Okla. City
 STARRY, L. J.1200 N. Walker, Okla. City
 STILLWELL, ROBERT J.American National Bldg., Okla. City
 Stone, Herman HullV. A. Hospital, Okla. City
 STONE, S. N.525 N. W. 11, Okla. City
 STOUT, HUGH A.413 N. W. 12, Okla. City
 STOUT, MARVIN E.200 N. W. 13, Okla. City
 STRECKER, WILLIAM E.521 N. W. 11, Okla. City
 STRENGE, HENRY B.O. U. Medical School, Okla. City
 STURM, ROBERT T.Medical Arts, Okla. City
 SULLIVAN, ELIJAH S.Medical Arts, Okla. City
 SUMMERFIELD, JEANNETTE BERYL628 N. W. 21, Okla. City
 SUTTON, FRED ROSCOE (R)1714 Windsor Place, Okla. City
 TAYLOR, CHARLES B.Medical Arts, Okla. City
 Taylor, Harry R. (R)604 N. W. 33, Okla. City
 TAYLOR, JIM M.Medical Arts, Okla. City
 TAYLOR, LEWIS CARROLL528 N. W. 12, Okla. City
 TAYLOR, ROBERT L.807 N. W. 23, Okla. City
 TAYLOR, W. M.625½ N. W. 10, Okla. City
 THOMPSON, WAYMAN J.438 N. W. 12, Okla. City
 THRELKELD, L. DUNCANMedical Arts, Okla. City
 Thuringer, Joseph M.O. U. Medical School, Okla. City
 Thurman, James Huston (R)2416 N. E. 25, Okla. City
 TOMA, PAUL2112 N. W. 12, Okla. City
 Tompkins, Souther F.Medical Arts, Okla. City
 TOOL, DONOVANV. A. Hospital, Okla. City
 TOWNSEND, CARY W.Medical Arts, Okla. City
 TRENT, ROBERT I.Medical Arts, Okla. City
 TULLIUS, PHILIP G.1223 N. Walker, Okla. City
 TURNER, HENRY H.1200 N. Walker, Okla. City
 VAHLBERG, ERNEST R.First National Bldg., Okla. City
 Vammen, Adolph N.O. U. Medical School, Okla. City
 VAN MATRE, REBER M.V. A. Regional Office, Okla. City
 VICKERS, PAUL M.525 N. W. 11, Okla. City
 VON WEDEL, CURT610 N. W. 9, Okla. City
 WADE, GLEN F.Medical Arts, Okla. City
 Wails, James OttoState Health Department, Okla. City
 WAILS, THEODORE G.Medical Arts, Okla. City
 WALDROP, WILLIAM L.605 N. W. 10, Okla. City
 Walker, J. L.Midwest Bldg, Okla. City
 WALKER, J. ROBERT1200 N. Walker, Okla. City
 WATSON, O. ALTON1200 N. Walker, Okla. City
 WELLS, EVAMedical Arts, Okla. City
 WELLS, LOIS L.609 N. W. 10, Okla. City
 WELLS, WALTER W.Medical Arts, Okla. City
 WEST, W. K.1200 N. Walker, Okla. City
 WESTFALL, L. M.Medical Arts, Okla. City
 WHITE, OSCAR R.1200 N. Walker, Okla. City
 WHITE, PHIL E.Perrine Bldg., Okla. City
 WIGGINS, CARRYL W.V. A. Regional Office, Okla. City
 WILDMAN, S. F.Medical Arts, Okla. City
 WILKINS, HARRY521 N. W. 11, Okla. City
 WILLIAMS, BYRON E.525 N. W. 11, Okla. City
 WILLIAMS, LEONARD C. 1200 N. Walker, Okla. City
 Williamson, William H.128 N. W. 14, Okla. City
 WILSON, CHARLES HUGHMedical Arts, Okla. City
 WOLFF, JOHN POWERS1200 N. Walker, Okla. City
 WINN, GEORGE L.Medical Arts, Okla. City
 WOLOHON, HARRY C.443½ N. W. 23, Okla. City
 WOODWARD, NEIL W.1200 N. Walker, Okla. City
 WRIGHT, HARPER318 W. Commerce, Okla. City
 WRIGHT, HARPER, JR. (J)Chattanooga Tennessee
 WYNN, NOBLE F.Edmond
 YOUNG, A. M., III525 N. W. 11, Okla. City

OKMULGEE COUNTY

ALEXANDER, L. A.	Okmulgee
ALEXANDER, R. L.	Okmulgee
Bell, William K. (R)	Henryetta
Berry, Virgil (R)	Okmulgee
BOLLINGER, I. W.	Henryetta
BOSWELL, HARRY D.	Henryetta
BUELL, ARTHUR L.	Okmulgee
CARLOSS, THOMAS C.	Morris
COTTERAL, JOHN	Henryetta
EDWARDS, JAMES G.	Okmulgee
Edwards, John	Okmulgee
Gill, D. C.	Okmulgee
Guess, James Edward (C)	Okmulgee
HAYNES, WILLIAM	Henryetta
HINDMAN, W. M.	Beggs
HOLMES, A. R.	Henryetta
Hudson, Walter Scott	Okmulgee
Hughey, Albert G.	Dewar
KENDALL, R. L.	Okmulgee
KILPATRICK, G. A.	Henryetta
LESLIE, S. B.	Okmulgee
LESLIE, S. B., JR.	Okmulgee
MABEN, C. S.	Okmulgee
MATHENEY, J. C.	Okmulgee
McCAULEY, D. W.	Okmulgee
McKINNEY, G. Y.	Henryetta
MING, C. M.	Okmulgee
MITCHENER, W. C.	Okmulgee
PETER, M. L.	Okmulgee
Pugh, John Henry (C)	Okmulgee
RODDA, E. D.	Okmulgee
SIMPSON, N. N. (H)	Henryetta
SMITH, C. E.	Henryetta
Stephens, Anthony M., Jr. (C)	Okmulgee
TRACEWELL, GEORGE L.	Okmulgee
TROW, THOMAS A.	Henryetta
WATSON, FRED S.	Okmulgee
White, James M. (C)	Okmulgee

OSAGE COUNTY

AARON, W. H.	Pawhuska
ALEXANDER, E. T.	Barnsdall
Bond, Eugene C.	Fairfax
Carmichael, Marvin M.	Osage
Chase, Warren W.	Barnsdall
DEAN, ROBERT E.	Fairfax
DOZIER, B. E.	Shidler
Govan, Thomas P. (R)	Pawhuska
GUILD, C. H., SR.	Shidler
KARASEK, MATTHEW	Shidler
LOY, WILLIAM A.	Pawhuska
McDONALD, GLEN W.	Pawhuska
MAZZARELLA, VINCENT	Hominy
Mullins, Ira	Hominy
Phillips, W. G.	Skiatook
Rust, Martin E.	Pawhuska
SMITH, R. O.	Hominy
STOTTS, C. S.	Pawhuska
Sullivan, B. F.	Barnsdall
WALKER, ROSCOE	Pawhuska
WALKER, G. I.	Hominy
WILLIAMSON, PAUL	Pawhuska
WORTEN, DIVONIS	Pawhuska

OTTAWA COUNTY

BARRY, J. R.	Picher
BUTLER, V. V.	Picher
CANNON, R. F.	Miami
CHESNUT, W. G.	Miami
CONNELL, MATT A.	Picher
Colvert, George W.	Miami
COSBY, GLENN W.	Miami
Craig, James W.	Miami
DeTAR, GEORGE A.	Miami
FORD, HARRY C.	Miami
GRAHAM, REX	Miami

Hampton, James B.	Miami
Hampton, James B., Jr.	Miami
HETHERINGTON, L. P.	Miami
HIGHLAND, J. E.	Miami
Hughes, Albert R.	Miami
JACOBY, J. S.	Commerce
KERR, WALTER C. H.	Picher
LETCHER, CHARLES W.	Miami
McNAUGHTON, G. P.	Miami
Ralston, B. W.	Commerce
Ritchey, Henry C.	Picher
RITTER, N. R.	Picher
RUSSELL, RICHARD	Picher
SHELTON, B. WRIGHT	Miami
Smith, W. B. (R)	Fairland
Staples, John H.	Afton
WENDELKEN, HAROLD W.	Miami
WORMINGTON, F. L.	Miami
WRIGHT, PRESTON E.	Miami

PAWNEE COUNTY

Barber, Leslie C.	Ralston
HADDOX, C. H.	Pawnee
LEHEW, J. L., SR.	Pawnee
Lively, Charles O.	Ralston
Mutz, Agnes T.	Cleveland
ROBINSON, E. T.	Cleveland
ROLLINS, JAMES H.	Pawnee
SADDORIS, M. L.	Cleveland
SPAULDING, H. B.	Ralston
WATERS, C. B.	Pawnee

PAYNE COUNTY

BASSETT, CLIFFORD M.	Cushing
BURNER, J. O.	Stillwater
DAVIDSON, W. N.	Cushing
DAVIS, WILLIAM O.	Cushing
FOSHEE, W. C.	Stillwater
FREED, LEON C.	Perkins
FRY, POWELL E.	Stillwater
GARNIER, WILLIAM H.	Stillwater
Gray, J. T.	Stillwater
HOLBROOK, R. W. (H)	Perkins
HUMPHREY, D. W.	Cushing
Leatherock, R. E.	Cushing
Love, Thomas A.	Ripley
MANNING, H. C.	Cushing
MARTIN, E. O.	Cushing
MARTIN, JAMES D.	Cushing
MARTIN, JOHN W.	Cushing
MITCHELL, L. A.	Stillwater
MOORE, CLIFFORD W.	Stillwater
Murphy, E. G.	Stillwater
NELSON, HAROLD G.	Stillwater
OEHLISCHLAGER, F. KEITH	Yale
PUCKETT, HOWARD L.	Stillwater
REDING, A. C.	Stillwater
Rigg, R. R.	Stillwater
RIPPY, ORVILLE M.	Stillwater
ROBERTS, R. E.	Stillwater
SANDERS, HAROLD R.	Stillwater
Schmidt, Loraine	Stillwater
SEXTON, C. E. (H) (R)	Stillwater
SMITH, A. B.	Stillwater
SMITH, HASKELL	Stillwater
Strode, Jack W.	Stillwater
Thomson, Joseph O.	Stillwater
THORP, EDWARD M.	Cushing
WAGGONER, ROY E.	Stillwater
WEBER, ROXIE A.	Stillwater
WILHITE, L. R.	Perkins

PITTSBURG COUNTY

BARTHELD, FLOYD	McAlester
Baum, Frank J. (R)	McAlester
BROWN, BRUCE	McAlester
COLYAR, A. B.	McAlester
DAKIL, L. N.	McAlester
DORROUGH, JOE	Haileyville

Ellis, Henry A.	Kiowa
FEAMSTER, R. C.	McAlester Clinic, McAlester
GREENBERGER, E. D.	McAlester
Groom, Walter W. (R)	McAlester
HARKINS, R. A.	McAlester
HENRY, M. L.	McAlester
KAISER, W. H.	McAlester
KUYRKENDALL, L. C.	McAlester
Ler BLANCE, WILLIAM P.	Hartshorne
LIVELY, C. E.	McAlester
McCARLEY, T. H.	McAlester
Miller, Frank A.	Hartshorne
MUNN, J. A.	McAlester Clinic, McAlester
NELSON, T. A.	McAlester
PARK, J. F.	McAlester
RAHHA, GEORGE M.	McAlester
RICE, O. W. (L)	McAlester
SHULLER, E. H.	McAlester Clinic, McAlester
SHULLER, THURMAN	McAlester Clinic, McAlester
STOUGH, A. R.	McAlester
Thomas, Ernest	Quinton
WAIT, WILL C.	McAlester
WHEELER, H. C.	McAlester Clinic, McAlester
WILLIAMS, C. O.	McAlester
WILLOUR, L. S.	McAlester
WILSON, HERBERT A.	McAlester

PONTOTOC COUNTY

Bentley, John A.	Allen
BISBEE, ROWE F.	Ada
BRASFIELD, JOHN A.	Ada
BRECO, JOSEPH G. (L)	Ada
BURNS, S. L. (L)	Stonewall
BYRD, WALLACE	Ada
CANADA, J. C.	Ada
COWLING, R. E.	Ada
Craig, John R.	Ada
DEAN, W. F.	Ada
DEESE, E. F.	Ada
DONOVAN, MARK H.	Ada
Forsythe, Thomas G.	Allen
GILL, WILLIAM T.	Ada
GULLATT, E. M.	Ada
HAUGEN, I. J.	Ada
Keyes, Robert (R)	Ada
McBRIDE, OLLIE	Ada
McKEEL, SAM A. (H)	Ada
MARTIN, FRANK J.	Ada
MILLER, O. H.	Ada
MOREY, J. B.	Ada
Morris, Richard	Allen
MUNTZ, EARL R.	Ada
NEEDHAM, C. F.	Ada
NORTHROP, R. U.	Ada
OSBORN, CARL D.	Ada
PADBERG, E. D.	Ada
PETERSON, WILLIAM G.	Ada
RICHEY, S. M. (H) (R)	Ada
SEABORN, T. L. (L)	Ada
Smith, Clarence B.	Roff
STEEHENS, GEORGE K.	Ada
SUGG, A. R.	Ada
TAYLOR, C. P.	Ada
Threlkeld, W. R.	Ada
WELBORN, O. E.	Ada
WELBORN, O. M.	Ada
YAGOL, H. B.	Ada

POTTAWATOMIE COUNTY

Applewhite, Gardner H.	Shawnee
ALTARAS, LEON M.	Shawnee
BAXTER, GEORGE S.	Shawnee
BAXTER, JACK W.	Shawnee
BEDDOW, ROBERT E.	Shawnee
BIRDSONG, GORDON G.	Shawnee
BROWN, ROBERT A. (L)	Prague
BYRUM, JAMES M.	Shawnee
CAMPBELL, HIRAM G.	Tecumseh
CARSON, JOHN M.	Shawnee
COMBS, LEON D.	Shawnee
Cone, H. L.	Maud
CULBERTSON, ROLLAND R.	Maud
DICKINSON, W. PAUL	Tecumseh
GALLAHER, CLINTON	Shawnee
GALLAHER, PAUL	Shawnee
GALLAHER, WILLIAM M.	Shawnee
Grant, Augusta I. (R)	Shawnee
Harrison, Thomas F.	Maud
HAYGOOD, CHARLES W.	Shawnee
HILL, R. M. C. (H)	McLoud
HUGHES, HORTON E.	Shawnee
KAYLER, ROBERT C.	McLoud
KEEN, FRANK M.	Shawnee
Linsky, W. L.	Maud
LOUDON, JAMES D.	Shawnee
LOWENSTEIN, BERNARD (A)	Shawnee
McFARLING, ALONZO C.	Shawnee
NAVIN, KENNETH W. (A)	Shawnee
Neal, LeRoy J.	Shawnee
NEWLIN, FRANCES P.	Shawnee
PARAMORE, CHARLES F.	Shawnee
RICE, E. EUGENE	Shawnee
WESTBROOK, BROCK R., JR.	McLoud
WILLIAMS, ALPHA McADAMS	Shawnee
Williams, Alonza J.	Shawnee
YOUNG, CLARENCE C.	Shawnee

PUSHMATAHA COUNTY

HUCKABY, B. M.	Antlers
LAWSON, J. S.	Clayton
Patterson, E. S.	Antlers
Sanders, W. A.	Antlers

ROGER MILLS COUNTY

CARY, WILLIAM S.	Reydon
(Member Beckham County Medical Society)	
PAYNE, V. R.	Cheyenne
(Member Beckham County Medical Society)	

ROGERS COUNTY

Anderson, Frederick A.	Claremore
ANDERSON, PAUL S.	Claremore
ANDERSON, W. D.	Claremore
Arnold, Ada Martin	Claremore
BESON, CLYDE W.	Claremore
GORDON, MINOR E.	Claremore
HOWARD, W. A.	Chelsea
JENNINGS, K. D.	Chelsea
McClellan, Chas. Wm.	Claremore
Melinder, Roy George	Claremore
MELINDER, ROY J., JR.	Claremore
MELOY, R. C.	Claremore

SEMINOLE COUNTY

Austerman, Warrington	Konawa
CHAMBERS, CLAUDE S.	Seminole
Coffey, A. V. (C)	Wewoka
Cone, Henry Lee	Maud
DEATON, ANDY N.	Wewoka
GRIMES, JOHN P.	Wewoka
HARBER, J. N. (H)	Phoenix, Arizona
Jones, Mary E.	Seminole

JONES, W. E.	Seminole
KNIGHT, CLAUDE B.	Wewoka
Lindsay, Wren A.	Maud
McGOVERN, J. D.	Wewoka
MOSHER, D. D.	Seminole
PACE, L. R.	Seminole
PRICE, J. T.	Seminole
REEDER, H. M. (L)	Konawa
SHANHOLTZ, MACK I.	Wewoka

SEQUOYAH COUNTY

Bryan, Cecil	Vian
Cheek, James A.	Sallisaw
ENDRES, ROBERT K.	Sallisaw
Fulton, William R.	Gore
Holcomb, John L.	Vian
Kirkland, Samuel S.	Sallisaw
MORROW, JOHN A.	Sallisaw
Shamblin, D. W.	Sallisaw

STEPHENS COUNTY

BOND, IRA T.	Comanche
Brewer, Joel R.	Marlow
CHEATWOOD, WILLIAM R.	Duncan
ELLIS, RICHARD A.	Duncan
GREGSTON, JACK L.	Marlow
Heflin, William Allen	Duncan
IVY, WALLIS S.	Duncan
KING, EVERETT G.	Duncan
LINDLEY, E. C.	Duncan
LINDLEY, E. H.	Duncan
McClain, William Z.	Marlow
McMahan, Alvain M.	Duncan
Nelson, Wallace W.	Duncan
PATTERSON, FRED L.	Duncan
PATTERSON, FRED L., JR.	Duncan
PATTERSON, JAMES L.	Duncan
PATTERSON, JAMES L., JR.	Japan—Army
Pruitt, Charles C.	Comanche
Richardson, Robert W.	Duncan
RILEY, N. C.	Marlow
TALLEY, CHARLES N.	Marlow
TAYLOR, FRED W.	Duncan
THOMASSON, E. B.	Duncan
WALKER, W. K.	Marlow
WEEDN, ALTON J.	Duncan
VAN SANDT, GUY B.	Wewoka
WALKER, AGNEW A.	Wewoka
WOOD, JACK	Seminole
WOOD, JULIAN D.	Seminole
Wright, Herbert L.	Sasakawa

TEXAS COUNTY

BLACKMER, L. G.	Hooker
BUFORD, E. L.	Guymon
CAWLEY, F. P.	Hooker
HAYES, R. B. (L)	Guymon
HOPKINS, GLENN	Guymon
McCOY, RONALD	Guymon
Morgan, James E.	Guymon
OXLEY, W. N.	Texhoma
SMITH, MORRIS W.	Guymon
Thurston, Harry E.	Texhoma

TILLMAN COUNTY

Allen, Charles C.	Tipton
ARRINGTON, J. E.	Frederick
BACON, O. G.	Frederick
CHILDERS, J. E.	Tipton
COMP, G. A. (H)	Manitow
FISHER, ROY L.	Frederick
FRY, F. P.	Frederick
FUQUA, W. A.	Grandfield
HUBBARD, WILLIAM E.	Tipton
(Member Jackson County Medical Society)	
Kleinschmidt, George W.	Tipton
TALLANT, GEORGE A.	Frederick

TULSA COUNTY

ADAMS, GEORGE M.	Medical Arts, Tulsa
ADAMS, R. M.	National Bank of Tulsa Bldg., Tulsa
AKINS, JACK O.	Medical Arts, Tulsa
Allen, Clifford Ward, Jr.	1129 S. Owasso, Tulsa
ALLEN, VICTOR K.	Medical Arts, Tulsa
Allison, Thomas Pickney	Sand Springs
Amos, Chios Lemuel	211 E. 10, Tulsa
ANDELMAN, SUMNER Y.	1611 S. Boston, Tulsa
ANDERSON, ROBERT L.	Medical Arts, Tulsa
APFFEL, PHILLIP R.	602 S. Cheyenne, Tulsa
ARMSTRONG, O. C.	Medical Arts, Tulsa
ATCHLEY, ROGER Q.	Medical Arts, Tulsa
ATKINS, PAUL NEWMAN	Medical Arts, Tulsa
ATKINS, PAUL NEWMAN, JR.	Braniiff Bldg., Tulsa
Bacoats, A. G. (C)	117 A. North Greenwood, Tulsa
Bailey, Byron Louis	1923 S. Utica, Tulsa
BARHAM, J. H.	Daniel Bldg., Tulsa
Bate, Charles (C)	352½ N. Greenwood, Tulsa
BEDDOE, HAROLD L.	3334 E. 25th Pl., Tulsa
BERG, MILTON L.	3505 S. Peoria, Tulsa
Beyer, J. Walter	1213 S. Peoria, Tulsa
BILLINGTON, J. JEFFREY	Medical Arts, Tulsa
BIVENS, WILLIAM S.	Medical Arts, Tulsa
BLACK, HAROLD J.	Medical Arts, Tulsa
BLOCKSON, BERGET H.	Medical Arts, Tulsa
BOONE, WILMOT B.	4117 S. 26 W. Ave, Tulsa
BOYD, HUGH	Medical Arts, Tulsa
Boyd, James Kendall	1745 S. St. Louis, Tulsa
BRADFELD, SAMUEL J.	Medical Arts, Tulsa
Branson, Charles S.	Rexall Bldg., Collinsville
BRIGHTON, CHARLES E.	604 S. Cinn., Tulsa
BROCKSMITH, HENRY A.	Court Arcade Bldg., Tulsa
BROGDEN, JAMES C.	Medical Arts, Tulsa
BROOKSHIRE, J. E. (H)	212 Ritz, Tulsa
BROWN, MANUEL	1619 E. 15, Tulsa
BROWN, PAUL R. (H)	1614 E. 35, Tulsa
BROWN, WALTER E.	2020 S. Xanthus, Tulsa
BROWNE, HENRY S.	Medical Arts, Tulsa
BRYAN, WILLIAM J.	Medical Arts, Tulsa
Bryant, R. C. (C)	360 N. Frankfort, Tulsa
BÜCHAN, WILLIAM	Braniiff Bldg., Tulsa
Burt, Houston (C)	1113 E. Pine, Tulsa
CALDWELL, CHARLES L.	115 E. 18, Tulsa
CALHOUN, C. E.	Sand Springs
CALHOUN, WALTER H.	Medical Arts, Tulsa
CAPEHART, JOHN D.	814 N. Osage Drive, Tulsa
CARNEY, ANDRE B.	915 S. Cinn., Tulsa
Cashman, Charles Albert	1330 S. Wheeling, Tulsa
CHALMERS, J. S.	Sand Springs
CHARBONNET, P. N.	Okla. Bldg., Tulsa
CHILDS, J. W.	Medical Arts, Tulsa
Choate, William G.	Mayo Bldg., Tulsa
CLINTON, FRED SEVERS (H)	230 E. Woodward, Tulsa
COHENOUR, HOWARD M.	Medical Arts, Tulsa
COOK, W. ALBERT (H)	Medical Arts, Tulsa
Coots, W. Norvell (C)	333 N. Greenwood, Tulsa
COULTER, THOMAS B.	Medical Arts, Tulsa
CRAIG, PAUL E.	Daniel Bldg., Tulsa
CRANE, DONALD V.	Medical Arts, Tulsa
CRAWFORD, WILLIAM S.	National Bank of Tulsa Bldg., Tulsa
DAGUE, JOHN C.	Tri-State Insurance Bldg., Tulsa
DAILY, RAYMOND E.	Bixby
DAVIS, ARTHUR H.	Medical Arts, Tulsa
DAVIS, GEORGE M.	Bixby
DAVIS, THOMAS H.	2020 S. Xanthus, Tulsa
DEAN, W. A.	Medical Arts, Tulsa
DENNY, E. RANKIN	Ashville, North Carolina
DODD, NEVIN W.	1453 S. Quaker, Tulsa
Dowell, Robert Fish	3822 S. 29, Tulsa
EADS, CHARLES H.	Medical Arts, Tulsa
ECHOLS, RAYMOND S.	1923 S. Utica, Tulsa
EDWARDS, D. L.	2020 S. Xanthus, Tulsa
ETHERTON, MONTE C.	10A S. Lewis, Tulsa
EVANS, HUGH J.	Medical Arts, Tulsa

EWELL, WILLIAM C.	1307 S. Main, Tulsa	McCann, William Edward Francis	1923 S. Utica, Tulsa
FARRIS, HANSFORD LEE	Medical Arts, Tulsa	McCarty, C. W.	1429 S. Main, Tulsa
Farris, Robert C.	1111½ S. Lawton, Tulsa	McDONALD, JOHN EDWIN	Tri-State Ins. Bldg., Tulsa
FIRST, SAFETY R.	Medical Arts, Tulsa	McDOWELL, RICHARD EARL	222 E. 5, Tulsa
FLACK, F. L.	McFarlin Bldg., Tulsa	McGILL, RALPH A.	Medical Arts, Tulsa
FORD, H. W.	915 S. Cinn., Tulsa	MacKENZIE, IAN	Medical Arts, Tulsa
FORREST, HERBERT JOE	1859 E. 17, Tulsa	MARGOLIN, BERTHE	1344 E. 17th Pl., Tulsa
FORRY, WILLIS W.	Bixby	MARKLAND, JAMES D.	Medical Arts, Tulsa
FRANKLIN, ONIS	Broken Arrow	MARTIN, RALPH F.	Sand Springs
FRANKLIN, SAMUEL E.	1619 E. 15, Tulsa	MATT, JOHN G.	Medical Arts, Tulsa
FULCHER, JOSEPH	Medical Arts, Tulsa	MAYGINNES, PATRICK HENRY (H)	1624 S. Norfolk, Tulsa
FUNK, ROBERT E.	Medical Arts, Tulsa	MERY, ALBERT M.	Braniff Bldg., Tulsa
GADDIS, N. C.	1530 S. Peoria, Tulsa	MILLER, ELNORA G.	1341 E. 36, Tulsa
GARRETT, D. L.	Medical Arts, Tulsa	MILLER, GEORGE H.	Atlas Life Bldg., Tulsa
GASTINEAU, FELIX T.	Medical Arts, Tulsa	MISHLER, DONALD L.	604 S. Cinn., Tulsa
Gentry, Thomas Christy	6820 E. Pine, Tulsa	MITCHELL, HUGH B.	915 S. Cinn., Tulsa
GILLILAND, CHAS. EDWARD	Court Arcade Bldg., Tulsa	MITCHELL, TOM HALL	National Bank of Tulsa Bldg., Tulsa
GLASS, FRED A.	2020 S. Xanthus, Tulsa	MOHRMAN, S. S.	1818 E. 15, Tulsa
GODDARD, R. KEENE	Skiatook	MOORE, EDWARD L.	Braniff Bldg., Tulsa
GOEN, RABURNE W.	Braniff Bldg., Tulsa	Moore, Matthew B.	Braniff Bldg., Tulsa
GOODMAN, SAMUEL	Medical Arts, Tulsa	Morton, W. A. (C)	523 N. Greenwood, Tulsa
GORRELL, BEN	Medical Arts, Tulsa	Motley, Robert William (C)	1944 N. Iroquois, Tulsa
GORRELL, JOHN FRANKLIN	Medical Arts, Tulsa	MULMED, EARL I.	Braniff Bldg., Tulsa
GRAHAM, HUGH C.	1307 S. Main, Tulsa	MUNDING, L. A.	Medical Arts, Tulsa
GREEN, HARRY	Medical Arts, Tulsa	MURDOCK, H. D.	Medical Arts, Tulsa
GROSSHART, PAUL L.	Medical Arts, Tulsa	MURRAY, P. G.	Medical Arts, Tulsa
HALL, GILBERT H. (H)	Rialto Bldg., Tulsa	MURRAY, SILAS	Medical Arts, Tulsa
Hamilton, Robert Luther	Sand Springs	NEAL, JAMES H.	521 N. Boulder, Tulsa
HARDMAN, T. J.	Medical Arts, Tulsa	NELSON, F. L.	Atlas Life Bldg., Tulsa
HARALSON, CHARLES H.	Medical Arts, Tulsa	NELSON, FRANK J.	2020 S. Xanthus, Tulsa
HARRIS, BUNN	Jenks	NELSON, I. H.	Medical Arts, Tulsa
HART, MABLE M.	602 S. Cheyenne, Tulsa	NELSON, MARQUE O.	Medical Arts, Tulsa
HART, MARSHALL O.	1228 S. Boulder, Tulsa	NESBITT, P. P.	1565 Swan Drive, Tulsa
Hawks, Edwin Andrew (R)	1302 S. Rockford, Tulsa	NEWLIN, W. H.	Broken Arrow
HAYNE, ROBERT A.	604 S. Cinn., Tulsa	NICHOLAS, HUGH B.	1918 N. Oxford, Tulsa
HAYS, LUVERN	2445 E. 27th Pl., Tulsa	NORTHROP, LAURENCE C.	1307 S. Main, Tulsa
HENDERSON F. W.	2541 E. 11, Tulsa	ORR, HERBERT S.	1307 S. Main, Tulsa
HENLEY, MARVIN D.	Medical Arts, Tulsa	PAKIK, EMIL E.	1923 S. Utica, Tulsa
HENRY, GIFFORD H.	Court Arcade Bldg., Tulsa	Palm, Irvin D. (C)	517 N. Greenwood, Tulsa
HILL, O. L.	915 S. Cinn., Tulsa	PARK, FELIX R.	Medical Arts, Tulsa
HOKE, C. C.	Philtower Bldg., Tulsa	Parmenter, D. C.	222½ W. 3, Tulsa
Holliday, Oliver M. (R)	1744 E. 13th, Place, Tulsa	PASCUCCI, LUCIEN	1923 S. Utica, Tulsa
HOOVER, W. D.	Stanolind Bldg., Tulsa	PAYV, CHESTER A.	Medical Arts, Tulsa
HOTZ, CARL J.	604 S. Cinn., Tulsa	PEDEN, JAMES C.	Medical Arts, Tulsa
HUBER, WALTER A.	Medical Arts, Tulsa	PERRY, DANIEL L.	222 E. 5, Tulsa
HUDSON, DAVID V.	521 N. Boulder, Tulsa	PERRY, FRED J.	Braniff Bldg., Tulsa
HUDSON, MARGARET G.	521 N. Boulder, Tulsa	PERRY, HUGH	222 E. 5, Tulsa
HULSE, CHARLES A.	604 S. Cinn., Tulsa	PERRY, JOHN C.	Medical Arts, Tulsa
HUMPHREY, BUEL H.	Sperry	Perry, William B. (C)	124½ N. Greenwood, Tulsa
HYATT, E. G.	604 S. Cinn., Tulsa	PETERS, JAMES C.	915 S. Cinn., Tulsa
Imler, Robert Lee, Jr.	1353 E. 26th, Place, Tulsa	PIGFORD, RUSSELL C.	Court Arcade Bldg., Tulsa
JOHNSON, E. O.	Medical Arts, Tulsa	POLLACK, SIMON	Branie Bldg., Tulsa
JOHNSON, MAXWELL A.	2020 S. Xanthus, Tulsa	PORTER, HORACE H.	Court Arcade, Tulsa
JOHNSON, R. CHADWICK	Sand Springs	PRESSON, LOREN C.	1948 N. Main, Tulsa
JOHNSON, RICHARD R.	Sand Springs	RAMEY, CLYDE	823 S. Detroit, Tulsa
JOHNSON, ROBERT HALL	2020 S. Xanthus, Tulsa	RAY, R. G.	915 S. Cinn., Tulsa
JONES, DELMAS B.	Medical Arts, Tulsa	REESE, K. C.	Medical Arts, Tulsa
JONES, W. M.	915 S. Cinn., Tulsa	REYNOLDS, E. W.	915 S. Cinn., Tulsa
KELLEY, JAMES WOODRUFF	Medical Arts, Tulsa	REYNOLDS, J. L. (H)	Orpheum Bldg., Tulsa
KEMMERLY, H. P.	Medical Arts, Tulsa	RHODES, R. E. L.	Medical Arts, Tulsa
Kline, Philip	1501 S. Main, Tulsa	RICHARDSON, JACK LEAHY	19 W. 10, Tulsa
KORNBLEE, A. T.	Medical Arts, Tulsa	Riordan, James J.	1923 S. Utica, Tulsa
KRAMER, ALLEN C.	Medical Arts, Tulsa	ROBERTS, T. R.	Wright Bldg., Tulsa
LARRABEE, WALTER S.	Medical Arts, Tulsa	ROGERS, JAMES W.	Medical Arts, Tulsa
Laumann, T. B.	206½ S. Main, Tulsa	RUBIN, H. J.	1619 E. 15, Tulsa
LAYTON, OTTO EARL	Collinsville	RUPRECHT, HOMER A.	604 S. Cinn., Tulsa
LEE, JUDAH K.	Court Arcade Bldg., Tulsa	RUSHING, F. E.	Medical Arts, Tulsa
LeMASTER, D. W.	Medical Arts, Tulsa	RUSSELL, G. R.	604 S. Cinn., Tulsa
Lewis, Everett Marion	834 S. Harvard, Tulsa	SALAMY, JOSEPH	2523 E. 11, Tulsa
Lhevine, Dave B.	1602 S. Madison, Tulsa	SANGER, WALTER BAILEY	Medical Arts, Tulsa
LHEVINE, MORRIS B.	Medical Arts, Tulsa	SCHRECK, PHILIP M.	Medical Arts, Tulsa
LINDSTROM, W. CARL	Medical Arts, Tulsa	SEARLE, MAURICE J.	Medical Arts, Tulsa
LONEY, WILLIAM R. R.	Medical Arts, Tulsa	SETHNEY, WALTER F.	2828 E. 15, Tulsa
LOWE, J. O.	Thompson Bldg., Tulsa	SHACKELFORD, PAUL O.	915 S. Cinn., Tulsa
LUBIN, EMANUEL N.	Medical Arts, Tulsa	SHAPIRO, DAVID	1101 E. 15, Tulsa
LUSK, EARL M.	915 S. Cinn., Tulsa	SHEPARD, R. M.	Medical Arts, Tulsa
LYNCH, PATRICK A.	1923 S. Utica, Tulsa		
LYNCH, THOMAS J. (L)	Court Arcade Bldg., Tulsa		
LYONS, MASON R.	Turley		

SHEPARD, S. C. Medical Arts, Tulsa
 SHERWOOD, R. G. Court Arcade, Tulsa
 SHIPP, J. D. Medical Arts, Tulsa
 SHOWMAN, W. A. Medical Arts, Tulsa
 SIMMS, UCA FRANCES Denver, Colorado
 SIMPSON, CARL F. Medical Arts, Tulsa
 SINCLAIR, FRANKLIN D. Medical Arts, Tulsa
 SIPPEL, MARY EDNA 1544 E. 15, Tulsa
 SISLER, WADE 807 S. Elgin, Tulsa
 SMITH, DELBERT O. 604 S. Cinn., Tulsa
 SMITH, RURIC N. Medical Arts, Tulsa
 Smith, W. E. 620 S. 53rd, West Ave., Tulsa
 SMITH, WENDELL L. 2431 E. Admiral Blvd., Tulsa
 SMITH, WILLIAM ORLANDO Tri-State Ins. Bldg., Tulsa

SPANN, LOGAN A. Braniff Bldg., Tulsa
 SPRINGER, M. P. 604 S. Cinn., Tulsa
 STALLINGS, T. W. 724 S. Elgin, Tulsa
 STEEL, MARCELLA R. 1356 E. 27th Place, Tulsa
 STEVENSON, JAMES Medical Arts, Tulsa
 STEWART, H. B. 1923 S. Utica, Tulsa
 STOKES, E. MALCOLM 1415 E. 15, Tulsa
 STOKES, LOWELL L. Medical Arts, Tulsa
 STOWELL, AVERILL 604 S. Cinn., Tulsa
 STRONG, PAUL THEODORE 2020 S. Xanthus, Tulsa
 STUARD, CHARLES G. Court Arcade, Tulsa
 STUART, FRANK A. Tri-State Ins. Bldg., Tulsa
 STUART, LEON H. Medical Arts, Tulsa
 SUMMERS, C. S. Daniel Bldg., Tulsa
 SUNDGREN, VINCEL 604 S. Cinn., Tulsa

31—MEDICAL DIRECTORY—

SWANSON, KARL F. 604 S. Cinn., Tulsa
 Taylor, J. H. 1304½ W. 17, Tulsa
 THOMAS, WILLIAM F., JR. Braniff Bldg., Tulsa
 THOMPSON, JAMES B. Medical Arts, Tulsa
 THOMPSON, OLIVER H. Court Arcade, Tulsa
 TRAINOR, W. J. Medical Arts, Tulsa
 TURNBOW, WILLIAM R. 2112 W. 41, Tulsa
 Turner, Howard F. 915 S. Boston, Tulsa
 TURNER, TOM R. 604 S. Cinn., Tulsa
 Turrill, V. L. 2616 E. 14, Tulsa
 TYLER, JOE E. 604 S. Cinn., Tulsa
 UNDERWOOD, DAVID Medical Arts, Tulsa
 UNDERWOOD, F. L. Medical Arts, Tulsa
 UNGERMAN, ARNOLD H. Medical Arts, Tulsa
 UNGERMAN, MILFORD S. Medical Arts, Tulsa
 VENABLE, SIDNEY C. (L) 1757 S. Columbia, Tulsa
 WADSWORTH, R. M. 1445 S. Quaker, Tulsa
 WALKER, WILLIAM A. Kennedy Bldg., Tulsa
 WALL, GREGORY A. (H) 1201 N. Main, Tulsa
 Wall, T. L. (C) 320 N. Greenwood, Tulsa
 WALLACE, ALBERT W. 603 S. Cinn., Tulsa
 WALLACE, J. E. Medical Arts, Tulsa
 WARD, BENJAMIN W. Wright Bldg., Tulsa
 Waynes, B. A. (C) 535 Okla. Place, Tulsa
 West, Glenn Arnold 222 E. 5th, Tulsa
 WHITE, ERIC M. Medical Arts, Tulsa
 WHITE, HAROLD A. Medical Arts, Tulsa
 WHITE, JAMES W. Braniff Bldg., Tulsa
 WHITE, N. STUART Medical Arts, Tulsa
 WILCOX, LOUISE Medical Arts, Tulsa
 WILEY, A. RAY Medical Arts, Tulsa
 WILLIAMS, THEODORE S. Medical Arts, Tulsa
 WILNER, SOL Medical Arts, Tulsa
 WITCHER, ROBERT B. Medical Arts, Tulsa
 WOLFF, EUGENE G. 1923 S. Utica, Tulsa
 WOODSON, FRED E. Medical Arts, Tulsa
 WRIGHT, KENNETH L., JR. 4107½ A, East 11, Tulsa

YANDELL, HAYS R. 2020 S. Xanthus, Tulsa

WAGONER COUNTY

DIVINE, DUKE G. Wagoner
 JONES, EDWARD A. Wagoner
 Minor, George Wesley (C) Tullahassee
 PLUNKETT, J. H. Wagoner
 RIDDLE, H. K. Coweta
 Surratt, R. B. (C) Porter
 Waldren, Dewey Wagoner

WASHINGTON COUNTY

ATHEY, J. V. (L) Bartlesville
 BEECHWOOD, E. E. Bartlesville
 BOGAN, R. J. Bartlesville
 Chamberlin, Elizabeth M. Bartlesville
 CRAWFORD, H. G. Bartlesville
 DAVIS, KIEFFER D. Bartlesville
 DENYER, H. E. Bartlesville
 Dixon, Joseph B. (C) Bartlesville
 ETTER, FORREST S. Bartlesville
 GENTRY, R. C. Bartlesville
 Gottschalk, Paul R. Bartlesville
 GREEN, O. I. Bartlesville
 HUDSON, L. D. Dewey
 Huntington, C. S. Bartlesville
 JOHNSON, C. L., JR. Bartlesville
 Jones, Samuel A. (R) Ramona
 Kennedy, John D. Bartlesville
 KINGMAN, W. H. (H) Bartlesville
 Le BLANC, WILLIAM Ochelata
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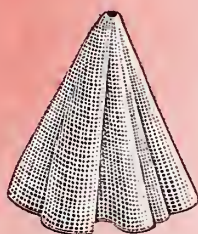
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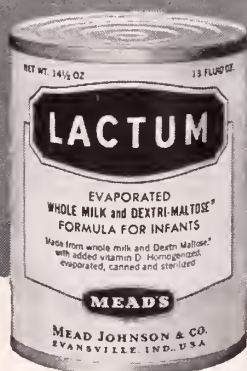
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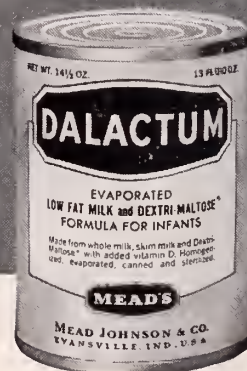
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